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ABSTRACT

Reported are results of the second year of a demonstration and training project to develop and test a model for training counselors to promote the vocational development of secondary level special education students. An overview of the project covers the need for the project, features of the new model, program objectives (including the design of an occupational counseling program for mainstreamed physically handicapped high school students), preservice activities (such as selection of the schools and interns), and project conferences. Outlined in a second section are such program components as emphasis on work and career, a developmental/outreach/activities approach, field trips to colleges and non-academic schools, guest speakers, evaluation of field trips and speakers, development of a newsletter, parent meetings, supervision and inservice training of interns, and dissemination and publicity. In Section III, the counselor is described as someone who will organize, plan, arrange, visit, find services that are not readily available, and at the same time serve as models for the students. In a final section, the student population is described and evaluative information from scores on the Career Maturity Inventory and responses to a Career Interview are presented. Appended are a sample Career Interview form, a counselor activity guide, a counselor activity report form, excerpts from a newsletter for parents, a counselor guide for student information form, and an outline of statistical data. (SBH)

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OCCUPATIONAL COUNSELING FOR PHYSICALLY HANDICAPPED STUDENTS: A DEMONSTRATION AND TRAINING PROJECT -- PHASE II

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Center for Advanced Study in Education
The Graduate School and University Center
of the City University of New York

in cooperation with the
Division Of Occupational Education Supervision
The New York State Education Department
University of the State of New York

CASE 26-77
August 1977

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FOREWORD

The past year has seen major policy breakthroughs in the national commitment to bring the handicapped into full participation as students, as workers, and as citizens. The White House Conference on Handicapped Individuals, the passage by Congress of Public Law 94-142, and the long-awaited issuance by the Secretary of HEW of regulations to implement Section 504 of the Rehabilitation Act of 1973 are, if nothing else, making schools and industry more aware of how much needs to be done to make equal opportunity a reality.

A key role in this effort is that of the counselor, and it is especially fortunate that at this time we have been able, with the continuing support of the New York State Education Department, to complete the second year of the program, Occupational Counseling for Physically Handicapped High School Students. The primary purpose of this project has been to develop and test out a model for training a new kind of counselor--one who can and will promote the vocational development of special education students. The model does this in a parsimonious way, by the use of a field-based internship, with intensive supervision by project staff in the field. The internship equips people who have already completed at least their basic training as counselors (and who may have worked as counselors in other specialties) with the specialized knowledge and skills needed to play a new role, in a setting where counselors have rarely functioned.

Our seven interns this year helped us take a significant step forward in the refining and field-testing of the new role model. In

four high schools they served as counselors-in-residence with the Health Conservation classes for students with physical disabilities. After an intensive period of orientation at the Institute of Rehabilitation Medicine, the interns gradually shaped for themselves a program of activities that included one-to-one counseling but that attempted to exercise a much broader influence on the total vocational development of the students. Increasingly they became active outreach workers who took students on college and industry field trips, brought in speakers from education and the world of work, conducted many structured career development group sessions, organized case conferences within the school to discuss individual students, and increased markedly the involvement of parents in school-sponsored activities. The counseling interns found willing collaborators in school librarians, regular classroom teachers, speech and physical therapists, and, of course, the special education teachers, with whom they worked daily as team members.

The data presented in this report not only support the belief that such a program can develop counselors for this specialized task in a one year internship, but also that the counselors, even during their training period, do make a noticeable impact on the high school students' attitudes toward schooling and work and their knowledge and competences needed to make and implement wise career plans.

The report contains detailed descriptions of what we feel were the more innovative and important activities of this year--the successful efforts to bring parents into active involvement in

their children's career development, the field trips and guest speakers, and the systematic use of a career maturity conceptual framework as the organizing scheme for all counselor activities.

The CUNY Institute for Research and Development in Occupational Education has sponsored this project as part of a multi-faceted group of projects dealing with the needs of handicapped students and workers--some dealing with high school vocational education programs, others with community college counseling and placement activities, and still others with the interaction between education and industry for optimal opportunity and development of this segment of our population. With planning for the third year of the OCP project well under way, we welcome visitors and requests for information about our activities.

LEE COHEN, Ph.D.
Director
Institute for Research and
Development in Occupational
Education

ACKNOWLEDGEMENTS

Once again we are indebted to the New York City Board of Education and to six of its high schools, without whose generous collaboration the OCP project could not possibly have been anything more than an idea.

A key role was played by the Bureau for the Education of Physically Handicapped (BEPH). Its director, Marcus Arnold and his associates who worked most closely with us--Dina Ehrlich and Dennis White--helped us identify and gain entry into the four Service Schools and the two Comparison Schools.

It is regrettable that the Board of Education policy regarding non-identification of individual schools makes it impossible for us to acknowledge our indebtedness to the many people in those six schools who made it possible for the interns and the project staff to function with a remarkable degree of freedom. These include the principals, assistant principals, special education teachers, regular classroom teachers, guidance staff, librarians, the speech therapists assigned by the BEPH, and the physical therapists and special education classroom aides assigned by the New York City Department of Health. Finally, the students themselves, already burdened by a full and busy school day, were gracious in making time to participate in project activities.

The Institute of Rehabilitation Medicine, under its director, Dr. Howard Rusk, and its director of Vocational Services, Mr. Meyer Siegel, generously accepted our interns as participating members of their orientation program for IRM psychology interns in September 1976. This invaluable experience placed the interns a large step

ahead of last year's group.

The interns themselves gave unstintingly of their time and energy. They were an unusual group in that they assumed in many ways the role of colleagues with the project staff and high school staffs and were responsible for many of the initiatives and ideas that made this a year of growth in the project. They are: Frances Dillon, Maryanne Horne, Karen Martin, Denise Matava, Elena Petruzzi, Ina Rosen, and Sylvia Weinstein. The project assistant this year was Diane Simon Levin; she played a major role in editing the newsletters and arranging for both the guest speaker and field trip components of the project for all four Service Schools and for writing those sections of this report that deal with those topics and the topic of parent activities.

IRDOE itself provided fine support for the project, beginning with the leadership of its director, Lee Cohen, who was in touch with all major aspects of the project from beginning to end of the year, and extending through the office manager, Melanie Bentley, and our excellent secretary, Gloria F. Davis. Other colleagues in IRDOE were a welcome source of consultation and help when needed; special recognition goes to David Katz, whose work on other projects dealing with the handicapped made him an active collaborator on the OCP project, on almost a daily basis.

The CUNY Graduate School and its Center for Advanced Study in Education, of which IRDOE is a part, provided a home, both physically and intellectually, that contributed especially toward the research components of the project.

Finally, we are grateful to the New York State Education Department for this opportunity to pursue for a second year an innovative program of research and development that promises to make significant contributions to the development of a new counseling specialty, and ultimately the improved and enriched career development of handicapped youth in this state.

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Project Director

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Project Associate Director

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I. INTRODUCTION AND BACKGROUND

A. Overview of the Project

This report deals with the second year of the OCP Project and reflects both expansion of the scope of the project and considerable refinement of the methods used. As before, the project was designed to accomplish three major objectives, each innovative in its own area: providing career counseling services to physically handicapped students within the context of a special education (but mainstreamed) program in high schools; training general counselors to work with a special population in this particular setting by the use of an internship and ancillary seminars; and developing a generalizable model for a counselor role in this kind of special education program.

In 1976-1977 seven interns served the classes of physically handicapped students in four high schools, where they each worked two days per week throughout the school year. This is twice the number of schools that were served in 1975-1976 by five interns. Qualitatively, this year's interns not only continued and expanded the individual and group counseling activities, but also increased greatly the program of field trips and guest speakers representing occupations and post-secondary educational institutions. Considerable progress was also made in the use of case conferences at the high schools, and in reaching parents of the students in order to inform them and involve them more fully in the career development of their children.

Another innovation this year was the introduction of an orientation program for the interns at the Institute of Rehabilitation

Medicine (the Rusk Institute). In some five days of intensive orientation spread over a period of two weeks, a number of staff members of IRM gave lectures, demonstrations, and tours and distributed published materials about medical and rehabilitative aspects of the major disability areas.

Details of these several components of the project, as well as technical evaluation reports, are included later in this publication. Project staff and cooperating school personnel unanimously reported major growth in the value of the services rendered by the interns. The first year of the project was for all of us a learning period; as a result of that 1975-1976 experience, all parties to the project--from the schools and the university--were in a much better position to train the interns, to utilize the facilities and resources of the school and community, and to offer a program of activities to the students and "important others" in their lives that significantly improves their competence to plan and implement effective and satisfying careers.

B. Need for the Project

The call for educational reform to provide occupational counseling has become increasingly vociferous from numerous segments of the United States population.[1] These include students, youth not attending school, parents, business and industry, labor, minorities, the handicapped, and the disadvantaged. While important for all age groups, occupational information and counseling have been increasingly emphasized as critical for high school students. Despite the importance of such information, recent studies have emphasized the

1. U. S. Office of Education. An introduction to career education. U. S. Department of Health, Education, and Welfare. Washington, D.C.: Government Printing Office, 1975.

limitations and inadequacies of occupational information and counseling that are provided for high school students.[2]

Large numbers of high school students, it has been found, are not sufficiently informed about the educational and job opportunities available to them. These students are also insufficiently aware of their own interests and abilities as they relate to occupations and educational choice.[3] The sharp contrast between youth's need for help with occupational planning and the actual help they have been receiving was recently highlighted by a nationwide survey of 32,000 eighth through eleventh grade students.[4] Numerous factors contribute to this situation, including inadequate numbers of guidance personnel, other priorities for counselor activities, limited preparation of counselors to function as career educators, and inadequate funding for programs.

While inadequate occupational counseling affects most high school students, certain segments of this population are more seriously affected. One group that is in need of even more occupational counseling than their non-handicapped peers are physically handicapped students. Physically handicapped students confront not only the objective limitations of their disability, but the public's negative attitudes and their own limited experiences and awareness of their

2. e.g., Ginzberg, E. Career Guidance, New York: McGraw-Hill, 1971.

3. Campbell, R.E. Vocational guidance in secondary education: Selected findings on a national survey which have implications for state program development. Paper presented at the National Conference on Vocational Guidance, Development of State Programs, U. S. Office of Education, Washington, D.C.

4. Prediger, D., Roth, J.D., and Noeth, R.J. Career development of youth: A nationwide study. Personnel and Guidance Journal, 1974, 53, 97-104.

potential. This leads to their unemployment or under-employment.[5] The economic and personal loss to society in general and to the physically handicapped population in particular is enormous. Estimates are that nearly two million handicapped students will have completed schooling by 1977 without the skills necessary for participating productively in our society.[6] Because of a recent New York State decision concerning mainstreaming handicapped students and a major federal commitment to require education for the handicapped, it can be anticipated that a growing number of these students will be receiving their education in public secondary schools where the occupational counseling services are already limited.

Further factors reducing educational and occupational options available to the handicapped are societal stereotyping attitudes and behaviors, operating either through discrimination or more subtle forms of rejection. These societal proscriptions and stereotypes affect the handicapped by restricting the numbers and kinds of exploratory experiences available to them, in order to make wise educational and occupational choices.

Handicapped students may be further limited by internalizing the attitudes of society and thereby imposing further limitations on their educational and vocational development. In addition, families of handicapped students may also impose limitations on their handicapped children's educational and occupational development

5. U.S. Congress, Report of Committee on Labor and Public Welfare on s.1539, March 28, 1974, pp 74-76.

6. Tapman, M.S. Two million without skills. Office of Education (DHEW), Bureau of Educational Personnel Development, Washington, D.C. February 1972.

through this internalizing process.

Interviews and discussions with professional personnel currently involved in counseling and providing occupational preparation of this disabled population (e.g., Board of Education administrators, college advisors in high schools, university college admissions officers) indicate that there is a minimum of activity related to the occupational counseling of the handicapped high school student. Those educators in a position to comment on the reasons for the apparent gap suggest such factors as the counselors' "inability to function adequately because of a lack of training," and avoidance of the disabled because "they are fearful" of working with them. Their views of the services currently available have been confirmed by the current project staff. Prior to the first year of this project there was no provision for intensive occupational counseling for physically handicapped students in high schools.

C. Needed: A New Model

What is needed is a model for the occupational counseling of physically handicapped students which is feasible within the given resources of the typical high school. A demonstrably effective model, which maximizes the handicapped students' potentialities and insures their fullest development for their own personal benefit, and for that of society as well, could then be disseminated statewide for use with other handicapped students. The OCP project continues to develop one such model through which physically handicapped high school students receive appropriate and effective occupational counseling.

The necessary features for this program include increasing

handicapped students' awareness of the educational and vocational opportunities available to them, with a strong advocacy orientation; increasing counselors' sensitivity to the somatopsychological effects of physical disability on handicapped high school students' development;[7] and developing a program that integrates students' cognitive understandings, feelings, and behaviors so that specific student behavioral outcomes are developed. These learner (student) activities, specified as competencies, can then be evaluated as having been achieved. Such a program, specifying learner outcomes, combines counselor training, didactic presentations, group and individual counseling, and field experiences, and involves the parents of the students to achieve its goals. Such a program considers the need to expand the competencies of general counselors, allowing for the attainment of the additional specialized knowledge and skills needed to undertake occupational counseling with the handicapped. This widened scope of competencies will increase counselors' service potential as well as their employability. In addition, internships established in understaffed settings will provide needed service to physically handicapped students.

D. Objectives

This program, developed to serve the needs of handicapped high school students, has three major objectives:

1. To design an Occupational Counseling Program (OCP) for physically handicapped high school students and demonstrate its effectiveness. The intent of this project is to enable physically handicapped students to achieve the following:

7. Meyerson, L., Somatopsychology of physical disability, in Cruickshank, W.M., Psychology of exceptional children and youth (2nd ed.). Englewood Cliffs, New Jersey: Prentice Hall, 1963, pages 1-52.

a. to develop greater self-awareness and vocational maturity;

b. to expand knowledge of educational and vocational opportunities;

c. to develop greater self-confidence in their ability to achieve their educational and occupational goals;

d. to develop more effective strategies and greater flexibility in achieving their occupational goals;

e. to help parents play a more realistic and facilitative role in their children's educational and occupational development;

f. to expand knowledge and facilitate utilization of available special services and financial aid.

2. To utilize a counseling internship to provide secondary schools with a model Occupational Counseling Program for handicapped students, and in so doing create a role model for counselors to deliver services in a special education setting. The intent of this aspect of the program is to fulfill the following:

a. to develop competency-based field experiences that specify learner outcomes in cognitive, affective, and behavioral areas;

b. to provide counselors-in-training with direct supervised experience in working with handicapped high school students, e.g., individual and group counseling, family counseling, career-choice counseling;

c. to help schools coordinate the delivery of in-school and out-of-school services for handicapped students, e.g., case conferences with subject teachers and special education staff, exchange of information and interface of services with the Office of Vocational Rehabilitation;

d. to develop mini-programs, procedures, materials for use by counselors and school staff, e.g., specific inservice and preservice training modules, occupational testing procedures, and lists of agency services;

e. to increase the availability of trained counselors with experience and competence in working with handicapped students.

3. To begin to develop a role model for a general counselor who will function primarily in the area of career guidance with physically handicapped students. During the first year of the project, in 1975-1976, we were able to develop only general and tentative ideas for the major components of such a model. During the second year we intended to approach the task of model building more systematically and to emerge with at least an outline of a model and more developed concepts of the major components.

E. Preparation for the Project

1. Selection of the schools. With the continuing support and advice of the Bureau for the Education of the Handicapped (BEPH) of the New York City Board of Education, most of the decisions about participating schools had been made well before the second year of the project began. The two schools in which interns had worked during 1975-1976 were eager to have us return for a second year, and the two comparison schools requested that we include them as active participants in 1976-1977. The four schools were appropriate in terms of location, socio-economic status, and other pertinent characteristics, and therefore with the advice of the BEPH we designated those four as project schools and two additional high schools as comparison schools for 1976-1977.

For convenience, we shall refer to the schools in which interns were placed as Service Schools A, B, C, and D, and the others as Comparison Schools E and F. Schools A and C are inner-city schools with total populations of 3,000 and 4,000 respectively, largely black and Puerto Rican. Each school has a double-section class for physically handicapped students (in New York City it is referred

to as a Health Conservation or HC-20 class) containing approximately forty students from ninth to twelfth grades, staffed by two special education teachers assigned by the BEPH, who are assisted by two aides from the New York City Department of Health.

Schools B and D are both near the edge of the city in residential areas with more of a suburban than city flavor in many ways. School B has approximately 3,500 students and School D 3,500. In both cases fewer than half of the students are black or Puerto Rican. School B has approximately thirty HC-20 students, School D approximately twenty. In the former case, there happens also to be a program for neurologically impaired students (HC-30 class) and several special education teachers serve both classes. At School D there is one special education teacher who is responsible for the HC-20 class.

In all four schools the students are mainstreamed for at least part of their day and use the HC-20 classroom as their homeroom, as the place to come during study periods and often during lunch periods, and in general as a home base where they receive special help with their studies and related health and family matters from the special education teachers and the several specialists who visit the school during the course of the week--reading, speech, and driver education staff from the BEPH, physical therapists from the Department of Health, and, of course, the counseling interns in this project.

2. Selection of the interns. Announcements of the positions for interns were made through the master's degree programs in guidance and counseling at the six colleges of the City University of New York that offer such programs. As a result of this and word-of-

mouth, approximately thirty people applied, of whom fifteen were found to meet the qualifications and were invited for a half-day session during which they were first observed as members of a leaderless task group and were then interviewed individually. The most promising seven candidates were selected as interns through this process.

There was some range among the seven interns, as to amount of course work and previous experience. However, all had either completed the master's degree in counseling or were in process of completing the degree by June 1977. Very few men applied, and all seven interns for this year are women. Most were in their twenties, and all had a strong sense of commitment to working with people in helping roles.

3. Preservice training of the interns. The major area in which the interns required intensive preparation is that of disability and rehabilitation. We were fortunate to be able to join an orientation program that the NYU Institute of Rehabilitation Medicine conducted in September 1976 for its own psychological and social work interns. We selected only those portions that were particularly necessary for our interns. These totalled approximately five full days and included the following topics and activities, as well as the distribution of a wealth of materials published by IRM and other sources:

Philosophy of Rehabilitation (Dr. Howard Rusk)

Tour of IRM

Activities of daily living

Activism and advocacy in the community of the disabled

Physical therapy

Hemiplegia

Occupational therapy

Spinal cord injuries

Neuromuscular diseases

Muscular dystrophy

Social service department

Rehabilitation nursing

Psychological reactions to disability

Disabilities in children

In addition, the OCP staff at CUNY spent several days with the interns in an introduction to special education and in helping them to deal with their feelings in connection with their work with handicapped students. Closed-circuit television was used during these meetings, both to play back some of the material that had been recorded at one of the participating schools during the previous year, and to help the interns see themselves as they began to deal with the problems they expected to encounter in the project.

All of these preservice activities, but especially the IRM orientation, was extremely valuable to the interns and, we believe, helped them to begin their work in the schools in October much better prepared for what lay ahead of them than had been the case the previous year.

F. Project Conferences

This year two conferences were conducted for public school and project staff. The first was held on November 1, 1976; this early conference was in direct response to suggestions made at the 1975-1976 end-of-year conference, to the effect that it would be useful to meet early in the year in order to exchange ideas for the year's work. Accordingly we arranged a working conference for the special education teachers and the counseling interns. Among the topics explored were: how to arrange schedules so that students can attend counseling groups; what topics teachers would like included in group sessions; solving problems encountered in arranging field trips; how to get parents involved; the role of the counselor in developing self-advocacy among handicapped students; and the need for sex education for handicapped students.

The second conference was held on June 17, 1977, and had as its main purpose an evaluative review of the 1976-1977 project and recommendations for the future. Invited to attend the all-day conference were all special education teachers in the four project schools, assistant principals to whom the HC-20 classes reported, those guidance counselors who had been involved in our project, regular classroom teachers who had exhibited special interest in the HC-20 students, speech therapists and physical therapists who worked with the HC-20 classes, the professional staff of the New York City Bureau for the Education of Physically Handicapped, OVR counselors, two community college counselors who are active in working with handicapped students, a staff member from the Institute of Rehabilitation Medicine, and the project interns and staff. A

total of thirty people attended; although not all the school people who were invited could attend, there was a good representation in view of the fact that the conference took place on a school day when several people had specific duties in connection with end-of-year examinations.

The conference was planned for a great deal of active participation by all; the planning itself was the responsibility mostly of the interns. It began with a brief review by a group of interns of the project's goals. Then we broke up into three groups, each of which was to assess how well those goals had been implemented, using a Project Evaluation form we had developed for this purpose; the form called for specific evaluation in terms of three broad career categories taken from career development theory: attitudes toward work, occupational information, and decision making and implementation regarding career. Then we conducted workshop groups on the following topics: reaching parents; transition from high school to college and work; sexuality and disability. The workshops were given twice, so that each participant could attend two different ones. At lunchtime each participant received copies of the Project Evaluation Forms that had been filled out by the morning evaluation groups. Following lunch, there was a brief demonstration of a case conference--an actual one that included staff of one school and that school's two interns. The participants then broke up into three groups to problem-solve the case. Finally, there was a brief general session during which participants were asked to make suggestions for future activities in the OCP project. Suggestions were made regarding program organization and content, relations with

regular subject teachers, and arranging for time and space so that students could receive a maximum of service.

Each participant received a packet that included reading lists, lists of resource centers, and reprints of a number of articles dealing with legal, financial, employment, and other aspects of disability.

II. SERVICE PROGRAMS AND ACTIVITIES

Building on the lessons learned from the first year of the project, 1976-1977 saw significant changes in the activities of the interns in the schools. For one thing, they were able to move into action much more quickly, benefiting from the experiences of the previous year's interns regarding such matters as obtaining space to conduct interviews and group sessions, organizing time so as to have maximum contact time with students, and structuring their activities to a much greater extent than had been the case during the past year.

A. Emphases in the Program

1. Orientation to work. Perhaps the most important qualitative aspect of the interns' work this year was an early and consistent emphasis on work and career. For example, early in the year a questionnaire was constructed, and administered to all students in all schools, titled the Career Interview (copy in Appendix). Developed also for research purposes as a pretest and posttest measure (the results of which are discussed in the Student Data Section), the questionnaire immediately began to stimulate the students to think about their occupational goals, reasons for those goals, and related matters. The interns also began earlier in the year to bring in speakers about occupations and to arrange visits to colleges and other post-high school educational institutions. As a result, many more of these activities were conducted than previously (a detailed report is included in a later section on field trips).

2. Structured activities. This year's interns, again benefiting from the experience of the previous year, gave considerable emphasis to planned structured contacts with students, especially group activities. Table 1 shows that the average student at all four schools participated in 6.9 sessions of "formal groups," that is, group meetings that were scheduled in advance and where, in most instances, the leader came to the session with specific goals and an "exercise" or "game" or "simulation" that focused on an aspect of career awareness, career information, or career planning. Examples are:

"Dream a Little"--the student is asked to dream of what s/he will be doing in some kind of work if there were no barriers or obstacles. The group members can then compare their responses.

"Life Skills Chart"--each student rates self on skills dealing with people, things, work, and numbers, and then the group discusses.

"Guidance Associates Filmstrip: Values"--students view the filmstrip, which points out that people have different work values, and are then encouraged to express their own values in relation to work.

"Career Clusters Sheet"--students are given a list of occupations and fifteen general headings. They are asked to placed each occupation in one of the fifteen clusters. Discussion then leads to the use of the Occupational Outlook Handbook for better understanding of the processes involved in jobs that link them together.

Some of these types of activities were also used in individual "formal interviews," of which the average student had 3.0, for an average total of 9.9 "formal activities" per student (See Tables 1 and 2 for details).

TABLE 1

Number of Formal and Informal Group Sessions Experienced by Individual Students

School	No. Students Served	No. Formal Sessions Per Student		No. Informal Sessions Per Student		Total No. Sessions Per Student	
		Mean	Range	Mean	Range	Mean	Range
A	30	2.5	0--7	.7	0-10	3.2	0-15
B	29	7.5	0-18	1.8	0--7	9.3	3-18
C	35	9.8	0-27	2.8	0--9	12.6	2-32
D	18	7.4	0-17	.7	0--3	8.1	0-20
All Schools Combined	112	6.9	0-27	1.6	0-10	8.5	0-32

Most of the "informal" group and individual sessions (mean 1.6 and 5.0, respectively) also dealt with career-related matters. Sometimes they were quite casual, but, more times than not, either the counselor or the student initiated such a contact with a specific topic that had grown out of the "formal" activities. Added to the "formal" activities, this meant that students averaged 16.5 contacts with the counselor.

TABLE 2

Number of Formal and Informal Individual Interviews Experienced by Students

School	No. Students Served	No. Formal Interviews Per Student		No. Informal Interviews Per Student		Total No. Interviews Per Student	
		Mean	Range	Mean	Range	Mean	Range
A	30	2.7	0-10	6.3	0-15	9.0	0-20
B	29	5	0-22	4.4	0-12	9.4	0-32
C	35	1.8	0--7	5.5	0-21	7.3	1-24
D	18	2.4	1--5	2.9	0-7	5.3	2-11
All Schools Combined	112	3.0	0-22	5.0	0-21	8.0	0-32

It is important to note, however, that there was a very wide range among students in numbers of contacts. Tables 1 and 2 show these ranges for the 112 students with whom our seven interns worked actively at the four schools. The total contacts per student at most schools ranged up to the 30's, with a few atypical cases going even beyond that.

It should also be noted that there were differences among the schools as to the numbers and types of activities engaged in. These differences no doubt reflect differences among the schools themselves as to facilities, scheduling, and student interests as well as differences among interns in their own preferred styles of functioning.

3. Career maturity emphasis. Increasingly this year the OCP project stressed the importance of a constant effort by our counselors to view and work with each student in the context of that student's own pattern of vocational development and maturing. As the year went on we asked the interns more and more to use the categories of the Crites Career Maturity Inventory (CMI) (see Section IV-A) as a conceptual framework for thinking about and reporting their activities with students. (The CMI was used as an evaluation instrument, and pretest and posttest data are reported in the evaluation section of this report.) In fact, we eventually developed a form for recording intern contacts with students--the Counselor Activity Report (copy in the Appendix)--which was based on the categories of the CMI, modified slightly for our purposes.

Table 3 summarizes the interns' activities in terms of the CMI categories. For all schools combined the largest percentages are found in C1 and C2, having to do with self-assessment and

TABLE 3

Intern Activities Classified by the Categories of the Career Maturity Inventory

	A_1	C_1	C_2	C_3	C_{4A}	C_{4B}	C_5	Other	Total Number of Activities
Schools	% of Total	% of Total	% of Total	% of Total	% of Total	% of Total	% of Total	% of Total	
A	22.5	15.9	20.9	2.4	5.3	.4	.8	31.5	244
B	11.8	34.6	31.6	3.4	5.4	1.8	1.6	9.4	496
C	15.1	31.7	26.5	5.0	1.4	.5	.3	19.1	873
D	0	38.8	30.8	0	0	0	0	30.3	201

Definition of CMI Categories:

Attitudes: A1 - To have a student favorably disposed to moving into the world of work and making a career choice.

Competences: C1 - To have a student learn something about herself/himself, e.g., needs, interests, abilities, likes, and dislikes.

C2 - To have a student learn something about jobs and occupations, e.g., job duties and tasks, employment opportunities, or occupational roles.

C3 - To have a student relate what one knows about one's self (C1) with what that student knows about jobs and occupations (C2) so as to choose (decide on) an occupation.

C4A- To have a student outline those steps necessary to achieve a career objective.

C4B- To have a student complete those steps necessary to achieve the career objectives.

C5 - To have a student seek solutions to dealing with barriers which thwart his or her movement toward a career objective.

Other - An activity not specifically dealing with career matters, most often personal or family in nature.

learning about the world of work, respectively. The next highest category for all schools combined is "other," which usually meant a personal or family focus that was often related to career but not dealing specifically with one of the CMI categories. Next came A1--attitudes towards work--and finally small amounts of each of the other categories.

These data suggest that the interns found that most of the handicapped students needed the relatively basic services and perhaps were not ready for the next steps. However, one possibility is that the interns limited themselves too much to the more traditional trait-and-factor kinds of activities and gave too little attention to the more developmental aspects that emphasize sequences in the vocational maturing process and that would have involved more emphasis on generic decision-making and planning activities.

Once again, a note of caution against over generalization. There are wide differences among schools as to the types of career maturity activities the counselors conducted. Of course, one source of differences is the judgment and interpretation made by the counselor as to the category to apply when recording each group or individual activity. But beyond that, it is quite likely that there are real differences among counselors in their major concentration of efforts; these differences reflect the counselor's own skills and preferences as well as the needs and readiness of the students being served, and also probably the atmosphere of the particular HC-20 class.

4. Examples of individual student sequences. To convey some of the flavor of the vocational development interventions as they functioned, we present below selected illustrations drawn from intern Activity Reports:

Student A seemed not to be thinking at all about his future. The counselor engaged the student in a number of individual and group activities, but little change was noted until a chance meeting, during a college visit, with a former student from that high school who now attends the college. Quite suddenly the student expressed a strong and continuing interest in planning for the future.

Student B seemed to be very much involved with a wide variety of individual and group activities, including several field trips. However, a critical phase occurred after many of these activities, when the student finally dealt quite explicitly with feelings about whether to continue to resist facing the reality of the handicap or to accept that reality and go on to develop coping skills.

Student C expressed an interest in some kind of musical career right from the beginning of the counselor's contacts with her. She attended a number of field trips and individual and group sessions during which she was exposed to other occupational areas and was helped to assess the wisdom of her choice of music. For her the process led to even stronger determination to seek a career in music, a determination about which she felt more confident because she had tested out her interests and values.

5. Developmental/outreach/activist approach. This second year's experience strengthened our belief that a counselor in a special education setting will be most effective by avoiding a

clinical, office-bound, problem-oriented kind of role and instead reaching out to all the students and emphasizing development of each student to a higher level of maturity. Our observations suggest that the most effective interns were a) those who planned and structured activities rather than "playing it by ear;" b) those who sought actively to engage students in counseling and counseling related activities; and c) those who were the most active in arranging case conferences, guest speakers and trips, and contacts with OVR, parents, and other people and agencies who could help the student to grow and receive necessary assistance of various kinds.

B. Field Trips

One goal of the project was to provide students with exposure to the world after high school, in the hope that this would increase their options for the future. Most students had a limited perception of the world of work and higher education and the many alternatives they could choose from. Part of this could be attributed to the fact that they had less opportunity for experiences outside the home and school than the average adolescent because of their disabilities. Furthermore, the low socio-economic backgrounds of many students may have limited their thinking about school and jobs. We especially wanted to expose them to a variety of role models who are disabled and therefore easier to identify with. At the same time we hoped contact with our disabled students would increase industry's awareness of the great variations among disabilities and would help to reverse negative attitudes and stereotypes.

Table 4 lists the field trips (and guest speakers) arranged for each of the four service schools. Many resources were used

TABLE 4

Field Trips Taken at the Four Schools

	School A	School B	School C	School D
October '76	L.I.U. CIPHER	Blaise Associates (Advertising agency)		
November '76		La Guardia C.C.		
December '76	Bulova School of Watchmaking Anna Fay-speaker	Chava Willig speaker N.Y.C.C.C. Counselor	Assemblyman Marchiselli speaker	Chava Willig speaker N.Y.C.C.C. Counselor
January '77	CIPHER	Bulova School of Watchmaking Museum of Natural History/Planetarium	CIPHER	
February '77	CIPHER P.S. 11	Maureen Healy speaker Legal Aid Attorney Queensborough C.C. WTFH	Sears Dept. Store Bulova School of Watchmaking	Maureen Healy Queensborough C.C. Bulova School of Watchmaking
March '77	Bulova School of Watchmaking	Speaker- N.Y.Telephone Co.	Lehman College Bronx C.C.	
April '77	Lehman College	Queens College WTFH L.I.U.	Blaise Associates Sears Dept. Store New York Philharmonic	Queens College
May '77		Bronx VA Hospital	Kirsch Beverage Company	
June '77			Bronx Zoo	

to establish contacts with businesses; these included publications listing business and trade schools that offer student tours, agencies that place handicapped workers, and local personal contacts. Many companies that were approached could not, or would not, make the necessary accommodations to host our students. Others were very cooperative, but the conflicts between the school calendar and the business day made trips infeasible.

When arranging trips to schools, the field coordinator for the project contacted the office that served handicapped students. In addition, teachers and students often supplied the name of an alumnus or alumna from the Health Conservation class who attended that college. Transportation arrangements were made by the interns in conjunction with the Health Conservation teachers.

1. Colleges. Students from all four service schools visited at least one local four year college and one community college. In addition, service schools A and B took trips to a university with dormitories fully accessible to the handicapped.

The major components of the college field trips included admissions and financial aid information, a tour of the campus, speakers representing various academic disciplines, a presentation by the counselor for handicapped students, and an informal discussion with disabled and non-disabled students.

Overall, these trips were very successful. The interns prepared their students with background briefing about what they might expect and the kinds of information they should make sure they received. The students were encouraged to ask questions about all aspects of college life. Naturally, student response to schools varied. In more than

one instance the college staff's formal lecture style "turned off" or intimidated the students and discouraged their active participation in the learning experience. This was in spite of the fact that the colleges were well supplied with suggestions as to the best way their presentations could benefit our students.

The campus tours, sometimes including a stop in the cafeteria and interaction with the college students, were the highlights of these trips. The disabled college students were very effective role models. Furthermore, the college counselors who were handicapped were young and easy for the students to relate to.

On the whole these trips were extremely broadening experiences for the students. Some critical incidents reported by the counselors should serve to illustrate their potential value. When one girl went to La Guardia Community College she observed wheelchair students getting around the campus themselves. At that point she realized she wants to and is capable of traveling on her own.

At Lehman College one student found the campus too large and, therefore, very tiring. Now she knows that this is a consideration she must investigate before choosing a school. Another student, who assumed she would like to go to Lehman after graduation, discovered that the school didn't offer the program she thought she wanted to major in. She then initiated trips to other colleges and simultaneously saw the advantage of narrowing down career programs before enrolling in school. Both of these students learned the importance of advance planning through very different types of experiences.

One student attended a trip to a local university for strictly social reasons. Until this point,the interns did not feel they were making any progress in stimulating that student to think about his

own career future. At the university, however, he met a student in the dorm whom he knew from the Board of Education Summer Program. He was very surprised and impressed to see someone he worked with training for a career rather than falling into a job. At this point he enthusiastically recognized that he had the potential for career training and subsequently contacted OVR. He doesn't want to go to college and is exploring the possibility of paralegal training.

Another student, after learning about the difficult program requirements at Queensborough Community College for lab technicians --a field with relatively few job opportunities--decided to increase her "marketability" by going for two associates degrees. She found that lab technicians with secretarial skills were very desirable and the program was quite feasible. In this instance, reading the academic information provided by the college expanded the student's career maturity and she did not have to abandon her original goals.

2. Vocational field trips. All four service schools took trips to the Joseph Bulova School of Watchmaking. It was important to visit a non-academic school and this one satisfied several needs. Naturally, no one expected a large number of students to specify this field as a career choice.

However, almost everybody enjoyed the trip and learned something new about careers, for one thing that watchmaking and repair is a feasible job for people with a wide range of physical handicaps. Students observed role models in the classes and had the opportunity to speak with graduates from the service high schools. Furthermore, female students were presented with a career alternative free of sex-role stereotyping. In fact, after the trip one girl changed

her expressed vocational choice from secretarial work to watch repair.

Generally, the field trips where students met disabled workers were most meaningful. The radio announcer at WTFM and the director of personnel at Sears Department Store were both handicapped. In these situations students were able to inquire about disability-related factors (e.g., How do you travel to work? Do you feel that you are treated differently than the other workers? Were you physically disabled before you ever worked?) as well as information about job training and required skills (e.g., What was your first job? How do you learn to work a computer? Are there many job opportunities for people with your skills?).

Preparation of "guides" at the field sites is as important as preparation of the students. Otherwise, businesses tend to give "public relations" tours which don't satisfy our purposes for the field trips. Any "hands on" experience is valuable and is usually fun for the students. At Sears, for example, everyone was shown how to operate the computerized cash registers and the key punch machines. These opportunities afforded some understanding regarding their abilities to master jobs using this type of equipment.

Counselors from two service schools brought students to attend parts of a series of meetings of a related, CUNY/IRDOE project, "CIPHER" (College and Industry: Partners in the Handicapped Employment Role). At these seminars community college counselors, placement officers, instructors, and handicapped students met with personnel officers or representatives from various fields (e.g., accounting, advertising, transportation) to discuss all facets

of the employment process for the disabled. Both our students and interns gained knowledge about the world of work. The interns acquired a deeper understanding of the milieu the students they were counseling would eventually enter. The adult manner in which students were treated was a novel experience for many. Several students were pleasantly surprised and reassured about the fact that employers care about them. One student had always believed that she would lie to any potential employer about the nature of her disability; however, after attending the CIPHER meeting she decided that the advantages of honesty outweighed any disadvantages.

C. Speakers

The purpose of guest speakers, like field trips, was to provide role models from a wide range of occupations in the world of work--whenever possible former students of the high school. To find effective speakers, inquiries were made of agencies, the project staff, and school personnel. When graduates of the Health Conservation classes were invited to speak, the teachers and the interns made the necessary arrangements. Otherwise, the field coordinator for this project arranged the presentation.

Careful preparation was an essential factor to make these successful learning experiences. Speakers were briefed on the purpose of the their visit as well as the students' level of understanding. It was equally important for the class to be prepared with some background information on the speaker's career so they could think about the question they would like to ask and thus, have a lively discussion.

Each guest speaker provided a unique perspective on the world

of work. However, as expected, the disabled speakers offered a more enlightening perspective. This is particularly due to the fact that their handicaps seemed to serve as a common denominator between students and speakers. Thus, the artificial barriers which exist between students and adults were broken down somehwat.

For example, Vincent Marchiselli is a physically handicapped State Assemblyman from an area close by one of the Service Schools. Had another representative come to speak about his or her job, it is unlikely that as lively an interaction would have resulted, because at this point in their development most of the students could not relate to a politician's job. Moreover, it would be just as difficult for the speakers to identify with the students. In this particular instance, the Assemblyman's presence showed that society's stereotypes and barriers could be overcome and this was a point for meaningful discussion.

Anna Fay, a disabled worker at the Institute of Rehabilitation Medicine, spoke about the rights of the handicapped. Her talk evoked students' feelings about the lack of accessibility at their school, and she made the class understand the need for organizations on legal rights. As a result of her talk, two students are going to try to organize such a group. They plan on contacting students at the other high schools through articles in "LINK" and eventually developing their own newsletters.

D. Evaluation of Field Trips and Speakers

1. Follow-up. To maximize the value of field trips and speakers, the counselors conducted follow-up discussions whenever possible, so that students' reactions to any facet of the experience

could be integrated into the career counseling process. Furthermore, their impressions and suggestions could help make future trips or speakers more effective.

Debriefing sessions were quite varied in nature. Sometimes counselors conducted formal groups discussing what students learned, going over the materials the schools or businesses distributed, and focusing on any personal feelings the experience stirred. However, it was just as common for students and counselors to explore their impressions about a visit or a visitor over lunch or during the ride back to school.

A more formalized method of students registering feedback would be valuable to the field coordinator when planning future trips and speakers. This may be an important area of development in the future.

2. Special problems. As successful as our program was, certain logistical difficulties hampered a number of trips. The students' bus schedules made their day a bit shorter than usual, which imposed extra limits on the places they could travel to. One of the most serious and frustrating problems encountered was the number of times the Health Conservation classes did not have school. On special testing or shortened school days (usually for teacher conferences) and when the weather was inclement, our students were not picked up for school. Trips had to be cancelled for both of these reasons. Even more important, we learned how these students lose more valuable class time than their non-disabled classmates.

A number of experiences with arranging transportation highlighted the real-life difficulties of the disabled. The special

vehicles required to transport some of the students were very costly. Naturally, this reduced the distance we could travel as well as the number of trips we could arrange. Red Cross vans and the school transportation companies served us many times; however, the days and times we could use their services were limited. Furthermore, there were a number of incidents when the school buses arrived late and others when they cancelled without substantial notice and students lost out on their planned trips. Because of the long lead time necessary to arrange all the logistics, trips were never rescheduled. This also inconvenienced the people at the field sites who had planned our visits. Perhaps the field coordinator and project staff could find service organizations who would sponsor some of our trips. This would increase the number of places we could visit and reduce the likelihood of last minute disappointments. With additional transportation resources more students could go on field trips. This would help in those situations where schools and businesses are reluctant to arrange rather elaborate programs for groups of six students or fewer.

3. Recommendations. Our experiences in trying to make students more aware of their educational and vocational future have led to the following recommendations:

a. As a follow-up to trips to colleges, our high school students should be "teamed" with college students and spend time attending classes and extracurricular activities with them. This experience would expand students' awareness of the differences, both social and academic, between high school and college and simultaneously provide an

"older sibling" who understands the difficulties a physical handicap presents. We tried to implement this idea this year, but the conflicts between school and college schedules made it too difficult.

b. The interns also learned that it is important to attract more sophomores to the trips to schools. The earlier students start exploring the possibility of post-secondary school, the better the chance of making the most informed and well thought through decision.

c. Within the high school there are a host of resources related to career development which went untapped. Counselors at Service School B took some students to the school's photography lab and invited a business teacher as a guest speaker. There are many more of these types of "mini-trips" and speakers which would benefit students and be arranged with minimal work. It is important for counselors to be familiar with the school staff and unique building resources as early as possible. In addition, perhaps students who are in the co-op program can have other classmates come visit their worksite.

d. Friends and family of students could come to speak to those interested in their occupations. This would increase family involvement as well. More graduates should be contacted for the same purpose. Field trips to these people's worksites would then be more meaningful and more fun.

e. Whenever possible, neighborhood stores and businesses should

be approached. Both WTFM and Sears were a short walk from their respective neighborhood schools. A counselor at another service school contacted the neighborhood's Businessman's Association which offered ideas for a number of possible trips in the area.

E. The Newsletter

A newsletter, LINK, was developed in the spring of 1976, during the first year of the project, in the hope that it would establish a base of communication between the project staff and parents. LINK was also designed to provide practical information and resources for parents of disabled children. In addition, it allowed students, project staff, and school personnel to relay their ideas to parents. (For sample copies of school newsletters see the Appendix.)

This year three issues of LINK were published for each of the four Service Schools. The newsletters were distributed in December, March, and June. The format was essentially the same as last year's. In the counselors' column the interns described their role, function, and goals in the first issue, and they used the later issues to keep parents up-to-date on their counseling activities. The Health Conservation teachers and other professional personnel, such as speech teachers, physical therapists, and resource teachers, contributed articles on matters they wished to convey to parents. Students were also encouraged to participate in whatever way they felt most effective. Their contributions included reports about field trips and speakers, compositions about personal experiences or plans, creative writing, poetry, and artwork, including original cartoons. Important dates, such as application deadlines, field trips, speakers, and school

events and holidays, were published in a column whenever they were available. In the March issue of LINK the general information page focused on summer jobs; this fed directly into the spring parent meetings discussed in a later section of this report.

The counselors reported that many students expressed their pleasure in seeing their writing and artwork in print. School personnel also reacted enthusiastically to the newsletter. However, there was a minimal feedback from parents, in spite of suggestions in LINK that parents contact us by phone, mail, or in person, for information or discussion. At this time we have no accurate assessment of parent reactions to their children's contributions or to the student activities, such as field trips, that were reported. An assessment of parent reaction to the newsletter would be a useful undertaking in the future. Perhaps a telephone survey a week after parents receive the newsletter would yield some valuable insights that could then be put to use. This might be done in conjunction with an activity they participated in, for example, a parent group.

F. Parent Meetings

The importance of parent contact was recognized by everyone working on the project. Because of past difficulties in attracting parents to the schools, the counselors adopted the goal of increasing this interaction through carefully planned parent meetings at each school. At three service schools the parent meetings were held in conjunction with Parent-Teacher Conference Night. Corresponding with the goals of the project, the programs were based on securing summer jobs for students. Speakers from agencies affiliated with summer employment programs were invited to outline the programs

and application procedures and answer questions. The Mayor's Office for the Handicapped, New York State Office of Vocational Rehabilitation, and the New York City Board of Education Placement and Referral Center were represented. Students were invited to accompany their parents to these meetings. In order to assure as large an attendance as possible, the counselors announced the meetings in the newsletter, sent invitations, and personally called each parent. Attendance was very good at two of the schools; fifteen out of nineteen parents attended the meeting at one school and eighteen out of twenty-nine participated at another. Almost every parent who told the counselors they would attend, did so. Refreshments were served and the counselors encouraged a sociable, informal atmosphere.

The counselors at the fourth service school called each parent in order to determine if they would attend a parent meeting and when would be the best time for the event. The majority of parents indicated that they preferred a Sunday afternoon gathering. A Dutch treat luncheon was planned. The counselors had to arrange opening the school and a babysitting service in addition to the other components of the meeting. A "Graduate Panel" made up of former students from the Health Conservation class were invited to speak about their college and/or career experiences. Each panelist answered a prepared list of questions, and parents and students were encouraged to ask their own questions. The counselors found this a very effective method of getting the group involved. Reading material relevant to the parents of disabled children was distributed at all four meetings.

These meetings were very successful initial attempts at parent workshops. Personnel at all four schools were pleasantly surprised by the extent of parent participation. In general, teachers rarely see more than three to five parents at a usual high school conference night. The large attendance at the meetings illustrates the effectiveness of personal contacts before the meetings, of making the meeting a special event, and of providing some payoff for parent attendance, e.g., summer jobs. Although the interaction among parents was minimal at the four meetings, many people expressed interest in forming a parent group; this should be considered for development in the future.

Two incidents, in particular, may serve as illustrations of the value of these meetings. In one case, in talking with a family one intern discovered that certain medical information about the student was lacking. As a result of the meeting the parents obtained the information and made it available to the school. At another school, a parent learned that he was eligible for an agency's funding program, that he would have remained unaware of were it not for this meeting.

As an outcome of the meetings, the counselors compiled a list of parents' concerns. In the area of jobs, parents are anxious about their child having a meaningful career and working hard. They expressed the need for information about training programs to teach marketable skills. Sources of summer jobs and other work experiences were requested. Many parents indicated that volunteer work would be as acceptable as a salaried job as long as it was a worthwhile position and, where necessary, transportation was provided. Naturally, concern

was expressed about the physical stress their children might encounter when working.

Parents were equally interested in their children's social development. In general, they want their child "to be happy." They possess an awareness of the need for self-confidence and inter-personal relationships; however, they questioned how they could best carry out their responsibilities in facilitating their child's growth. In addition, they wanted to know how they can get their child involved in outside activities.

There is a need for parent education regarding the legal rights of the handicapped; the whole family would benefit by taking full advantage of their rights. Parents need more information about funding agencies such as OVR; this knowledge may alleviate some of their worries about the high cost of schooling combined with the enormous special transportation and home equipment costs.

Increased involvement with the school staff would help assure parents that their child is completing the appropriate courses necessary for high school graduation, college entrance,and appropriate jobs. The Graduate Panel highlighted the need for parents to hear about what other handicapped students have accomplished.

Parent contact has demonstrated the need for early exposure to the career potential of their children and the funding agencies that can make career objectives a reality. It is especially important that parents be aware of the range of opportunities available to their children, so that at home they can encourage and support the increasingly mature career development behaviors necessary for their children to attain suitable vocational objectives.

G. Survey of Parents

We attempted to develop a general picture of parents' career expectation of what their child will do upon graduation from high school. In other words, we wanted to take the first steps in the process of assessing the "career maturity" of the parent. To accomplish this, late in the year the counselors collected responses from forty-seven parents whom they could reach through telephone or direct contact conversations. Many other parents were difficult to reach, and language presented a barrier for several others.

Because the questions were not posed uniformly by the several interns nor the information recorded in a standard fashion, the data presented below should be viewed as preliminary and exploratory in nature. A general pattern of responses emerged among the schools; parent replies to the question about future career expectations for their child fell into the following five general categories:

1. College as a goal. Responses in this category indicated that the parents expected their child to attend college. Some answers included specific schools or careers. Sixteen out of forty-seven parents' responses (34%) fell into this category. Five parents merely stated "college." The more detailed answers are as follows:

"Howard University, if possible, teaching if that's what she wants."

"Hunter College."

"College for secretarial skills."

"College then law school."

"Psychologist."

"Scientific area, maybe medicine."

"Computers, Queens College vs. Queensborough."

"Medicine."

"Music and maybe science."

"Teacher."

"I hope I will be able to afford college."

2. Non-college goal. This group of parents clearly stated that they anticipate a job in their child's future. However, their replies indicated that college was not being considered for the immediate future. The following eight responses (17%) represent this second category:

"Would like child to go into a field like computers because he likes to work with his hands and numbers."

"Steady and regular work."

"Any good experience."

"Playing organ."

"He's handy with tools--would be a good mechanic or cook."

"Family van business."

"Automechanic school."

"Bookkeeping or recordkeeping; general office work."

3. Child's decision (whatever makes her/him happy). The principal characteristic of responses in this category was the parents' attitude that their child's own choice, and happiness, was most important. Ten parents' answers (21%) comprise this group:

"Up to son. Would go along with his interest in the guitar."

"Up to him. Whatever he can do well."

"Up to child, probably a secretary."

"Whatever he chooses."

"A career he will enjoy."

"Whatever he wants--now it's college."

"Whatever she wants--probably working with people."

"Up to child, learn what he needs in high school--maybe recordkeeping."

"Whatever makes her happy--maybe training program where she can learn an office skill; college probably out."

"Would like, of course, for child to go to college, maybe take up secretarial skills, but it's most important for her to be happy."

4. No idea--what can s/he do? Ten parents (21%) responded to the counselors' questions with their own queries. They expressed a lack of awareness about their child's career potential and the steps involved in deciding on and seeking a job. These parents seemed open to guidance and suggestions.

5. Child disabled--no future. Three parents (7%) reacted as if career planning was irrelevant. For these parents, their child's handicap obviated any thoughts of work as part of the child's future. The following responses illustrate this category:

"Can't work at anything; he has to be watched all the time."

"When it comes time for her to work, I'll work for her."

"She shouldn't even consider working; she's too young and too sick."

"I don't want her to work."

In addition to the responses classified in categories one through four above, some parents added a comment expressing concern over their child's disability. Although these parents envisioned further schooling and/or work for their children, they felt that their child's disability limited the options for the future. The five following comments represent this subcategory:

"Situation where system would not be upset and cause intestinal condition to activate. Limited physical activity in job situation is important."

"Concerned child's mind wanders and she can't see well."

"Can't move around on his own, and he gets tired too fast."

"Needs medical attention."

"Health too uncertain to know."

A more extensive survey of this type is a consideration for next year. In order to utilize the information to the fullest, it would be advantageous to implement a formal full scale survey early in the year. This would also insure early parent exposure to the project and provide the opportunity to inquire about how the project could best serve their needs.

H. Supervision and Inservice Training of Interns

As is well known to teachers, classes differ from year to year in their makeup. This year's interns were unusually willing and able to take initiative in such matters as planning the contents of the weekly seminars. As a result much of the supervision and training conducted by the OCP staff was collaborative in nature and, we believe, richer and more valuable as a result.

First it should be noted that some of the day-to-day supervision/administration was handled at the schools by various people--the special education teachers, the special education coordinator in one school, the guidance director in one school, and the appropriate assistant principal in each school. These were the people who oriented the interns to the schools, helped them to become acquainted with the students, and helped them with problems

of facilities, equipment, and scheduling. These were also the people who shared their experiences and accumulated wisdom with the interns, several of whom had had little or no experience in high schools since they themselves were pupils.

The content supervision by CUNY staff was conducted in two major ways. First was the weekly seminar, which began at the end of the preservice orientation period held at the Institute of Rehabilitation Medicine in September and continued to June. With few exceptions these seminars were held on Friday mornings from 9:30 a.m. to noon and provided an excellent opportunity to air and discuss the week's experience at the schools--both to exchange ideas and to deal with the feelings aroused by the project experiences. Most of the seminars also included a planned presentation on a topic announced at least a week in advance. These included:

Workshops on interest assessment techniques (during which everybody took the Hall Occupational Orientation Inventory, Vocational Card Sort, and the Strong-Campbell Interest Inventory).

Role playing various problems.

The Cube (analysis of counselor roles and priorities).

Videotaping and playback of interview skills.

An assertiveness workshop.

A meeting with staff from the Institute of Rehabilitation Medicine to review cases.

A visit to the Manhattan Special Education Information and Materials Center (SEIMC) of the Board of Education.

A workshop on the Dictionary of Occupational Titles.

Several seminars on the career maturity view of career development so that interns could use its concepts for planning their activities and recording them on the Student Activity Sheets.

Intern presentations of individual case reports.

In several instances an intern demonstrated a group technique or other method that that person had learned in a course or a field experience. Thus we were able to benefit from the fact that the interns had had some diversity of training and experience.

The second major method of content supervision was the conference held at the school. With few exceptions, each school was visited weekly by an OCP staff member--either the Director or Associate Director. During each visit there was a conference with each intern--or with two interns together--lasting perhaps a half hour to an hour. This was a time to discuss specific students, program activities, relationships with school staff, special problems, and plans for the future. In addition, the OCP visitor spoke at least briefly with the special education teachers and, when appropriate, an assistant principal, speech therapist, or physical therapist.

In connection with all of the CUNY supervision activities, each intern turned in a log each week reporting and commenting on the week's activities. Later in the school year we developed the Counselor Activity Report as a more useful device than the log; it is described in Section IIA, 3 of this report and is included in the Appendix. Finally, each intern wrote up a case report on every student worked with in any way; a copy of that form is also in the Appendix.

All these activities not only permitted close and intensive supervision and instruction, but also provided a "presence" of the project in the school, and communicated to school and project people

both that we regarded the project as an important program of the University.

I. Dissemination and Publicity

During the course of the year there were several good opportunities to publicize the project; most of these grew out of press releases prepared by the CUNY Graduate School's Office of Community Relations. One was a radio broadcast in March on WNYC during which the project director was interviewed on a weekly program called "One in Nine," hosted by Eunice Fiorito of the Mayor's Office for the Handicapped.

In May, the Director, Associate Director, and several of the interns made a presentation to the monthly colloquium sponsored by the Center for Advanced Study in Education at the CUNY Graduate School. The project was described in detail, and videotapes made the previous year as part of the project were shown.

News items about the project also appeared in school newspapers and, toward the end of the previous project year, in a weekly newspaper serving the area in which one of the project schools is located.

Finally, we are scheduled for a program session describing the OCP project at the annual meeting in October 1977 of the New York State Personnel and Guidance Association.

III. A MODEL FOR THE COUNSELOR

Much of the material in Section II of this report, dealing with Service Programs and Activities, speaks directly to the topic of counselor role in a special education setting. Therefore, only a brief statement is made here.

The essence of the role of the counselor as we have been formulating it over this period of two years consists of activism, outreach, development, and, to a certain extent, advocacy. The goals are for the students to become increasingly aware of themselves in relation to the world of work, increasingly skilled in making decisions and plans, and increasingly strong in self-advocacy.

We have learned that these handicapped students as a whole, as compared with national norms, are deficient in career maturity and are also deficient in the academic areas. This will come as no surprise to those who are familiar with the facts--that many of these students have missed out on school time over the years because of their disabilities and have had relatively little professional counseling available to them. In addition, our impression is that few parents of these students are in a position to offer much help with reference to their children's educational and career development. In fact, few parents even come to open school and parent night programs, let alone reach out to the school, OVR, or other agencies on their own initiative.

For all these reasons, and no doubt others, these students as a whole are not only inadequately developed educationally and vocationally, but also seem to have a limited view of how they will fit into the world of work. True, for many of them, the future is

bleak, and they will have to have even more drive and expend more energy than nonhandicapped people in order to attain the educational and occupational level of which they are capable.

If all students need activist counselors who will reach out to them and promote their career development--and we believe they do--students with handicapping disabilities need such counselors even more. Therefore, we are increasingly committed to the development of a model for counselors who will play this kind of role. There are implications here not only for counseling education programs--both the academic and the field components--but also for selection of trainees who will be likely to play this kind of role. In many ways, it is a different kind of person from the one who functions in a clinical kind of setting with self-referred clients who usually have problems that trouble them sufficiently to seek help of a therapeutic nature.

Our developing model calls for counselors who will organize, plan, arrange, visit, find services that are not readily available, and who, by doing all these things, are at the same time serving as models for the students in living their own lives.

During the coming year, with the aid of further support, we intend to devote more staff time to the detailed formulation of a role model conceptualization, and to limited dissemination of a written statement of that model, in order to obtain reactions from a wide variety of people in counseling, special education, school administration, and other fields.

IV. STUDENT DATA--DESCRIPTIVE AND EVALUATIVE

A. Overview.

As with the first year of this project the goals of this data collection effort were both descriptive and comparative. First. we sought to collect and present information for the purpose of describing in personal and vocational terms handicapped students who are mainstreamed into regular high school classes. It is expected that this information will be useful in refining our future counseling programs, in generating new programmatic efforts, and in stimulating future research projects. Second, the comparative or evaluative goal of this data collection effort was concerned with ascertaining the effects on students of their contact with the program as imparted by the counseling interns. Two kinds of evaluative comparisons were made. First, in each service and comparison school preprogram data were compared with postprogram data. Second, comparisons were made between the Service Schools and the Comparison Schools.[8]

Demographic data were collected in all six project schools; this included such information as grade levels, reading levels, and disabilities. Information relevant to students' perceptions of work and their place in it was also compiled. This vocational information included scores on the Career Maturity Inventory (CMI) --a 6 scale measure of attitudes and competencies that are important

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8. The OCP project dealt with intact classes as we found them. Service Schools were only roughly matched with Comparison Schools on degree of "urbanness." Since this was the case, the term "comparison" rather than "control" school is deemed appropriate.

in career decision making [9]--and responses to a Career Interview comprising seven open-ended questions concerning expressed occupational choice and the factors attendant to that choice.

The use of the CMI along with the use of the Career Interview provides a balance between an assessment procedure based on a standardized test and one based on a less structured open-ended means of tapping students' vocational life space. The latter was added this year because it was our opinion, based on our data collection effort last year, that formalized tested assessments may be less than sensitive to changes in vocational perspective and career decision making. Students also appeared to perform less well in formal test situations, perhaps as a result of factors unique to their disabilities, e.g., having a generalized negative reaction to being tested so frequently. However, where the formal testing procedures were used in administering the CMI, accommodations were made to maximize student cooperation in completing the inventory, including reading questions to the student and recording the responses.

B. Description of Student Population.

The total numbers of students registered in the four Service Schools and two Comparison Schools were 129 and 46 respectively (total = 175). The actual number of students in a school at any one specific time was about 80% of the total class roster. Absenteeism was due primarily to common ills, to which many of these students are especially vulnerable, hospital stays related to their disabilities, and truancy.

The overriding generalization about this student population,

9. Crites, J.O., Career Maturity Inventory. Monterey, Calif. CTB/McGraw-Hill, 1973(a)

despite the fact that they are grouped in a special education program because of their disabilities, is that they represent a highly heterogeneous group of individuals. Student characteristics of a demographic nature which are outlined below will illustrate this point; this information about students, supplied by the six project schools, includes grade level, age level, reading proficiency, and disability. (Differences in the number of cases across data categories are the result of missing information.)

Table 5
Percent of Students at Each Grade Level at the Project High Schools

School	N	Grades			
		9	10	11	12
Service A	38	18.4	44.7	15.8	21.1
Service B	29	34.5	51.7	10.3	3.5
Service C	42	40.5	21.4	26.2	11.9
Service D	19	10.5	15.8	68.4	5.3
Comparison E	17	23.5	23.5	41.2	11.8
Comparison F	28	17.8	25.0	28.6	28.6

Table 5 summarizes the distribution of all students by grade level in all six project schools. It is apparent that the schools differ in the distribution of students at various grade levels. Service School C had an influx of ninth graders, School A had a fair number of twelfth graders, and Schools B and D had few seniors. Therefore, counseling interns (and the service delivery component of the project) faced a wide range of vocationally related

problems and issues associated with students' grade (and age) level. In addition, interns had to be prepared to serve the needs of any large group of students that had concerns in common, e.g., graduating seniors.

Table 6

Age of Students in the Project Schools
As of October 1, 1976

School	N	Age	
		Mean	Range
Service A	38	16.7	13.0 to 20.0
Service B	29	16.0	13.9 to 18.8
Service C	43	16.4	13.9 to 18.7
Service D	18	16.4	14.3 to 17.11
Comparison E	17	16.8	13.11 to 18.1
Comparison F	27	16.8	14.9 to 19.9

The age range of students, which appears in Table 6, further illustrates the heterogenous nature of the student population. On the whole students were older than expected by grade placement, reflecting academic deficiencies (see Table 8). Not only was there a wide age range within each school but also within any one grade level. For example the age of students at the beginning of the project year for all grades at Service School C, were as follows:

- Grade 9, $\underline{M}$ = 15.4 ($\underline{n}$ = 17); range = 13.9 to 17.3
- Grade 10, $\underline{M}$ = 16.0 ($\underline{n}$ = 9); range = 15.1 to 17.4
- Grade 11, $\underline{M}$ = 17.2 ($\underline{n}$ = 11); range = 14.11 to 20.0
- Grade 12, $\underline{M}$ = 18.1 ($\underline{n}$ = 5); range = 17.4 to 18.7

The disabilities which necessitated students' placement in the HC-20 classes are widely distributed among over forty diagnostic categories. Many disabilities have multiple functional limitations, for example, cerebral palsy, and some are degenerative, such as muscular dystrophy. Ten to fifteen percent of the students in any one school made use of a wheelchair.

The most common conditons found in the combined student population at all six project schools were: cerebral palsy (25%), post-polio (9%), muscular dystrophy (6%), cardiac (5%), spina bifida (4%), paraplegia, generally traumatic (4%). The distribution of disabilities at each of the six project schools appears in Table 7.

The wide diversity of disabilities, both in terms of diagnostic categories and functional limitations, was initially difficult for the counseling interns to comprehend. In understanding the condition of any one particular disabled student, interns had as resources: school records, the special education teacher, the school nurse when available, and the students themselves. While some of the students were not knowledgeable about their disability, most could be relied on when necessary to give the counseling intern an expert orientation to their own medical condition.

Counseling interns changed their reactions to disabilities with time. Interns appeared to pass through a stage of hypersensitivity and interest, then went to the opposite extreme of being unconcerned as to the extent to which disabilities could influence occupational choice ("they can do anything they put their mind to"), finally moving to a realistic consideration of the influence both ability and disability can play in the choice of an occupational goal and in the steps needed to reach it.

Table 7

Disabilities of Students in the Project Schools

Service A n = 36	Service B n = 29	Service C n = 42	Service D n = 17	Comparison E n = 16	Comparison F n = 27
Cerebral palsy (11)	Cerebral palsy (10)	Cerebral palsy (8)	Cerebral palsy (5)	Cerebral palsy (3)	Cerebral palsy (5)
Post polio (5)	Cardiac (3)	Muscular dystrophy (5)	Post polio (2)	Osteogenesis imperfecta (2)	Post polio (3)
Muscular dystrophy (3)	Post polio (2)	Asthma (4)	Sickle cell anemia (2)	Scoliosis (2)	Asthma
Asthma (2)	Spina bifida (2)	Cardiac (4)	Bilateral amputee	Slipped epiphysis (2)	Blastomycosis
Osteogenesis Imperfecta (3)	Asthma	Spina bifida (3)	Brain tumor	Calcification of selected joints	Cardiac
Paraplegia (2)	Congenital bilateral absence of lower extremities	Paraplegia (3)	Cystic fibrosis	Cardiac	Chronic malabsorption syndrome
Scoliosis (2)	Congenital glaucoma	Post polio (3)	Multiple congenital anomalies (upper and lower extremities)	Congenital quadruple amputee	Chronic renal failure
Arthrogryposis	Diabetes	Cerebral ataxia (2)	Neurological/ spinal trauma	Dystonia	Crohan's disease
Burns	Extensive burns	Burns	Paraplegia	Heart murmer	Degenerated cartilage
Cystic fibrosis	Hemiplegia	Dystonia	Rheumatoid arthritis	Legg perthe's disease	Diabetes
Lupus	Hemophilia	Multiple congenital anomalies	Seizures	Post polio	Dislocated hip
Post-op triple ortholosis	Legg perthe's disease	Multiple sclerosis			Double amputee
Quadraplegia	Muscular dystrophy	Neurologial bermitosis hemihypertrophy			Leg fracture
Slipped hip	Sickle cell anemia	Osteogenesis imperfecta			Muscular dystrophy
Spina bifida	Spinal atrophy	Partial paralysis			Multiple sclerosis
Ureterotomy	Tibia vera	Pelvic trauma			Neck fracture
		Scoliosis			Paraplegia
		Sickle cell anemia			Quadraplegia
		Slipped epiphysis			Spina bifida
					Thrombophlebitis
					Turner's syndrome

Note. Numbers in parentheses indicate frequency of occurrences.

It is interesting to note that organizations affiliated with the major disability groups did not appear to have a formal role vis-a-vis the school or parents. Individual special education teachers and counseling interns did avail themselves of the offerings of various associations but only on an individual referral basis. It would appear that some formal ongoing articulation between the schools and agencies/associations ought to be established to take advantage of the services offered to both children and their families.

Table 8 summarizes information on student reading levels and is presented here as a reflection of academic proficiency. Reading levels were culled from information on file at the school. In some instances where no test data were available teacher estimates were used. Reading level information that was on file was not always up-to-date; therefore, for comparison purposes reading ability is presented in terms of the difference between the measured reading level and grade level at the time the student was tested. The statistic describes the extent to which a student was reading below, above, or at grade level when tested. Table 8 specifically summarizes this information in the form of the mean difference between reading level and grade level for students in each of the six project schools. The range of the differences is also given.

Table 8

Differences Between Reading Level and Grade Level at the Project Schools

Schools	N	Reading Proficiency		
		Mean	Range	% Below Grade Level
Service A	31	-3.7	-6.8 to + .4	97
Service B	28	-1.7	-6.1 to +2.3	75
Service C	40	-3.3	-7.1 to +1.8	93
Service D	16	-0.9	-4.4 to +3.9	69
Comparison E	15	-4.1	-8.3 to +1.9	93
Comparison F	21	-2.3	-7.6 to +1.9	86

Note: This table summarizes differences between reading level and grade level at the most recent time the student was tested.

It is obvious these students read poorly; almost all the students in some schools scored below grade level when tested. Within the four high schools grade reading levels in any one Health Conservation class could range, at a minimum, across seven grade levels. The extent to which socio-economic factors are associated with students' reading levels is illustrated when comparing Schools A and C which are both inner city in nature and B and D which are both suburban in nature. Although manner of test administration will assuredly influence test performance for these students, it is known that at Service School A (97% of the students reading below grade level) accommodations were made to take into consideration any test taking problems due to disability.

Whatever may be the multiple causes of academic deficiency--

disability, socio-economic status, etc.--it is obvious that academic deficiencies will have a marked dampening effect on efforts to provide new career opportunities for these students. Due to a lack of basic skills many of these young people will be able to take advantage of only a small portion of the opportunities brought about by current changes in the law and public attitudes.

C. Career Maturity

Vocational choice as a developmental process, specifically John Crites' notion of career maturity,[10] provided this project with the following integrating elements: a basis for the program's outcome objectives for the handicapped students, guidelines for the day-to-day counseling undertaken by interns (see Section IIA), and the use and development of measures needed to determine the impact of the program on counseled students. A discussion of this latter element--the impact of the counseling program on the career development of students--is the specific focus of this section of of the report.

The concept of career development entails a view of vocational behavior as being ontogenetic, that is, developing over time. Thus, choice of occupation is seen as the result of a series of processes that unfold over time on a number of dimensions rather than as the result of a single event.[11] A model of those career dimensions that develop over time was advanced by Super as an

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10. Crites, J.O., Measurement of vocational maturity in adolescence: I. Attitude test of the vocational development inventory. Psychological Monographs, 1965, 79 (2, whole No. 595).

11. For an early statement on career decision making as a process see Ginzberg, E., Ginsburg, S. W., Axelrad, S., & Herma, J.L. Occupational choice. New York : Columbia University Press, 1951.

outcome of the Career Pattern Study,[12] and were further refined by Crites. Those dimensions outlined by Crites and specifically pertaining to the exploratory stages in career choice process, from late childhood to early adulthood, are divided into two major categories: attitude and career choice competency.

Career choice attitudes refers to an approach-avoidance dimension with regard to work and the career choice process in general. Development occurs on this dimension to the extent that an individual develops positive feelings about moving into the world of work and making a career choice. Career choice competencies refers to those problem solving skills and the information needed to choose an occupation or career wisely. Career maturity refers to the extent to which one has acquired both the feelings about work and the career choice process (attitudes) and the problem solving and information skills (competencies) which will lead to an effective career decision. Both the attitudinal and competency dimensions in this model therefore represent developmental tasks to be mastered on the way to making an occupational choice.[13] The rationale for the use of the career development model with disabled students stems from our goal of introducing counseling interventions in order to increase their readiness for an upcoming career choice, based on assessment of where each student is developmentally.

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12. Super, D.E., Crites, J.O., Hummel, R.C., Moser, H.P., Overstreet, P.L., & Warnath, C.F. Vocational development: A framework for research. New York: Teachers College Bureau of Publications, 1957.

13. Crites, J.O. Theory and research handbook for the career maturity inventory. Monterey, California : CTB/McGraw-Hill, 1973(b).

To assess the career maturity of students two instruments were used: the Career Maturity Inventory (CMI), [14] a six scale measure developed by Crites, and the Career Interview, specifically developed for this project (see Appendix for a copy). The results obtained using the CMI will be considered first.

1. Career maturity inventory. The CMI has two major components, the attitude scale and the competence test. The attitude scale of the CMI consists of 50 true-false items which tap the feelings, subjective reactions, and dispositions that the individual has with regard to making a career choice and moving into the work of work.[15] The five attitudinal clusters that make up the scales, along with sample items, are given below:

a) Involvement in the career choice process.
Sample item: I seldom think about the job I want to enter.

b) Orientation toward work.
Sample item: Work is worthwhile mainly because it lets you buy things you want.

c) Independence in decision making.
Sample item: I plan to follow the line of work my parents suggest.

d) Preference for career choice factors.
Sample item: Whether you are interested in a job is not as important as whether you can do the work.

e) Conceptions of the career choice process.
Sample item: A person can do any kind of work he wants as long as he tries hard.

The competence test of the CMI consists of five scales which measure the more cognitive elements involved in occupational decision making.[16] Each scale contains twenty multiple choice items.

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14. op. cit., Crites, 1973(a).

15. Crites, J.O. Administration and use manual for the career maturity inventory. Monterey, California. CTB/McGraw-Hill, 1973(c).

16. op. cit. Crites, 1973(c).

The five scales with sample items appear below:

a) Self-Appraisal (Knowing Yourself).
Sample item: Duane does a lot of wood shop work at home and also takes shop courses at school. He has made several professional-looking cabinets and has won a prize for one in a citywide contest. He is now trying to decide if he has enough skill to continue with cabinetmaking. What do you think?

F The work he has done suggests that he has above average cabinetmaking skill and interests.

G If his friends think he has cabinetmaking skill, he probably does and should continue making cabinets.

H He should plan carefully, since he may not have enough skill to be a successful cabinetmaker later on.

J He has skill in making cabinets and he should also design them.

K Don't know.

b) Occupational Information (Knowing About Jobs).
Sample item: Tony carefully placed the piece of iron between the jigs on the surface of his drill press. Before going on, he checked his measurements and the exact place where he wanted to drill the hole. He then lowered the drill until it started to spin through the metal. When he finished, he again measured the inside of the hole before placing the iron in the bin next to his bench. This was the last piece in this job; after lunch he would set up his drill to work on connecting rods. What is his occupation?

A. Optician.

B. Instrument assembler.

C. Machinist.

D. X-ray technician.

E. Don't know.

c) Goal selection (Choosing a Job).
Sample item: Don has been on the debating team for two years and has been a Big Brother for children without parents. He likes working with people and has been president of the Junior Class in his high school. His best grades are in social studies. He has had high grades

in all his courses and plans to go to college. Which one of the following occupations would be best for him?

A. Advertising copywriter.

B. Production planner.

C. Policeman.

D. Social worker.

E. Don't know.

d) Planning (Looking Ahead).
Sample item: Sophia has decided to be a printer. Three steps she can take to become one are below. Which is the correct order.

1. Train as an apprentice printer.

2. Pass journeyman printer's tests.

3. Get a job as a printer's "devil" (assistant).

e) Problem solving (What Should They Do?).
Sample item: John wants to be an engineer and has the ability to be one. But his grades are poor and he thinks he may not get into college. What should he do?

A. Work harder and get better grades.

B. Talk with his teachers or a counselor.

C. Expect to get into colleges despite his grades, because he has the ability.

D. Change his occupational choice to something else that doesn't require college.

E. Don't know.

The attitude scale, consisting of fifty true-false items, and the five competence scales, each consisting of twenty multiple choice items, make up the entire CMI. Items, and correct responses to them, have been rationally derived from career development theory and then empirically refined to differentiate among age and grade levels in adolescence. Thus, the higher the grade level the higher the expected score on any of the scales. The individual raw score

for any of the six scales is the total number of correct responses to items on that scale. Grade norms are also provided for each of the six scales.[17] Readability of all six CMI scales is at the sixth grade level; however, because of some material which includes technical terms, the competence scale has words and phrases that exceed a sixth grade reading level.[18] The suggested administration time is thirty minutes per section or 2-1/2 hours when administered consecutively.

2. Administration of the CMI. As during the first project year modifications were made in the standard administration of the CMI to meet the special needs of physically handicapped students. The inventory was administered individually (or in very small groups of two or three) with students working at their own pace without speed requirement on any of the scales. Work on the inventory took place during approximately ten pretesting and ten posttesting days at each of the four schools. To minimize disruption of normal class routines, students worked on the CMI (as with other instruments) during free periods or in some cases during remedial reading or English classes. For some students with reading difficulties, generally those reading below the sixth grade level, the inventory was presented orally. Some students received spot help with difficult words where it would not involve giving away the answer to the question. Help with writing answers was also given to students when needed. All of these modifications were used in the first project year when we were

17. Op. Cit., Crites, 1973(c).

18. Op. Cit., Crites, 1973(b).

determining the feasibility of this type of group assessment. As during that effort no problems were encountered with these procedures.

The major evaluation problem we did confront during the first project year, as far as the CMI was concerned, involved incomplete data. Students either could not or did not want to complete the entire inventory. Refusals to take the CMI and/or difficulty completing it occurred during the pre and posttesting but more so during the posttesting at the end of the school year. Two effective steps were taken this year to obtain more complete CMI data: one involved the test administration and the other involved the inventory itself. These are described next.

The CMI pretest (Fall 1976) was administered by noncounseling personnel at the six project schools. This allowed interns at the service school to begin their acclimation to training, the schools, and the students. In addition it avoided confusion in the student's mind between counselors and testers. However, for the posttesting (Spring 1977) the interns collected the CMI data. This decision was in part based on the logistics of testing everyone in a short period of time and also on the assumption that students would take the inventory more readily for the interns than for "strangers," especially during the end-of-year rush of events. We recognize the methodological problems with this procedure, particularly when comparing the service schools with the comparison schools where noncounseling personnel did all of the testing. However, it is better to collect a complete set of less than precise data than precise but incomplete data. This same rationale applies in our

approach to changes made in the CMI itself which are described below.

Only half of each of the six CMI inventory scales was administered to each student. Each student was pretested and later posttested on the first half of each scale; therefore the inventory as administered consisted of seventy-five rather than the total one hundred fifty items. For the purposes of this report and for comparison with the CMI norms, each of the half-test scores was doubled. The data are therefore presented here and treated as if the student took the whole inventory. In instances where we compared students who took the complete inventory last year as well as half of it this year we observed close agreement in scores (in fact too close, as will be seen from the point of view of demonstrating the impact of the project).

3. Descriptive Data. To present a general description of the career maturity of handicapped students involved in this project student performance on the CMI is summarized in Table 9. The table summarizes the pretest scores of every student in the project over the last two years. The scores of students both in service schools and comparison schools are included since they are comparable, having been obtained prior to the interventions at the service schools. CMI scores are given by grade level for students who completed each scale. The percentile (based on published norms) corresponding to the mean CMI score for each grade is also given.

Table 9

CMI Pretest Scores for All Project Students by Grade Level
for Two Project Years Combined

Scales	Grades			
	9	10	11	12
A1				
M	27.7 (77)	28.4 (60)	30.4 (31)	34.4 (29)
%ile	12	14	16	29
C1				
M	9.5 (73)	10.7 (54)	11.2 (29)	13.2 (21)
%ile	33	34	22	35
C2				
M	10.8 (68)	12.2 (52)	12.3 (27)	15.0 (21)
%ile	39	40	29	42
C3				
M	9.9 (67)	10.0 (49)	11.1 (28)	13.8 (20)
%ile	47	39	30	41
C4				
M	9.4 (65)	10.8 (47)	11.1 (22)	12.9 (19)
%ile	61	52	46	46.6
C5				
M	6.3 (62)	7.9 (47)	7.1 (24)	10.4 (19)
%ile	48	56	35	51

Numbers in parentheses indicate number of students who completed each scale.

Scales: Attitude (A1), Self-Appraisal (C1), Occupational Information (C2), Goal Selection (C3), Planning (C4), Problem Solving (C5).
Maximum score A1 = 50.0, C1 to C5 = 20.0 each

Raw scores on all six CMI scales increase across grade level (except C5 in grade 11). Descriptively, the CMI scores for these separate groups of disabled students follow the expected upward developmental trend--which is the operational definition of increasing career maturity. These cross-sectional data therefore support the view that disabled students increase in their career maturity. The present results with a larger number of subjects is the same as the trend observed in the normative data presented in last year's report.[19]

Two elements stand out with regard to the normative data presented in Table 9. One is a "spurt" effect with regard to raw CMI scores and the other is a "dip" effect with regard to percentile scores. CMI raw scores for most scales rise more rapidly between the eleventh and twelfth grades (the spurt) than across grades nine, ten and eleven. Concomitantly, students in the ninth, tenth and eleventh grades appear to be losing ground on the competence tests (C_1-C_5) relative to the norm group, as evidenced by dropping percentile scores (the dip). Do the "spurt and dip" indicate that a self-selection factor is operating, with the less career mature students dropping out of school around the eleventh grade, or does it represent an actual developmental leap as students go from the eleventh to twelfth grade and approach graduation?

In considering the question posed above we examined a small number of CMI scores obtained from students who had taken the inventory three times, during the Fall of 1975, the Spring of 1976, and the Spring of 1977. These longitudinal data for the attitude

19. Goldman, L. & Flugman, B. Occupational counseling for physically handicapped high school students: A demonstration and training project. (Report No. CASE-31-76) New York: CASE Institute for Research and Development in Occupational Education, CUNY, 1976.

scale, obtained from all four service schools, are outlined below:

	10/75	5/76	5/77
o Ninth grade when first tested (n=11)	M=28.7	M=29.2	M=30.2
o Tenth grade when first tested (n=23)	M=29.7	M=31.1	M=31.7
o Eleventh grade when first tested (n=11)	M=30.7	M=31.6	M=32.0

The career development of students presented longitudinally suggests as do the cross-sectional data of Table 9 that students increase gradually in their career maturity over time. The longitudinal data do not suggest a developmental spurt as students go from the eleventh to twelfth grades. (A larger sample of longitudinal data from non-treatment students would be needed to increase our confidence in both of the above assertions.) We believe that the implications of these observations are the following:

a. Physically handicapped students are developing vocationally over time. They do not become interested in work or acquire information about it at one specific time, as for example in the twelfth grade. Since students' career development occurs over time, it would appear logical to infuse career information and career counseling into their educational experience throughout the high school years rather than "just concentrating on graduating seniors" as some teachers and school administrators advise.

b. CMI data would seem to corroborate observations that students are dropping out along the way or remain in one holding grade (e.g., the eleventh) until they reach the maximum school age. This suggests that counselors ought

to examine carefully the tenth and eleventh grades, where clientele with the more difficult vocational problems may be residing. Seniors, in fact, may be the self-selected survivors of a weeding-out process and may therefore need less counseling than expected. This self-selection process and loss of students as they proceed through high school also needs to be more carefully documented with follow-up information collected on those who drop out as well as those who finish twelfth grade.

c. Finally, the relationship between percentile scores for the attitude scale and the competence scales also merits comment. Percentile scores across grades for the attitude and competence scales range from twelve to twenty-nine, and from twenty-two to sixty-one respectively. This is taken to indicate a better performance on the competence scales relative to norms than on the attitude scale and may reflect the extent to which disabled students gather information about work and reaching occupational objectives but are not attracted to work as a future endeavor or do not expect to work. On an individual basis this would seem to suggest that counselors ought to explore the extent to which a student is integrating feelings about work with facts about the working environment.

4. Comparative data. To determine if students' career maturity changed as a result of the intervention of the OCP project, students' pretest scores were compared with their posttest scores. The performance of the Service Schools was also compared with the Comparison Schools. The pre to posttest period was generally October 1976 to

the end of May 1977.[20] The mean CMI scale scores for all project schools for both the pre and post administration appear in Table 10. The pre to post comparisons in all cases represent the same students and are therefore repeated measures.

Overall, absolute changes observed between the pre and post-test scores are not large. Correlated t tests were performed for all scales at all schools and few significant increases in scores were observed, except in Service School B for the following scales: (A1) attitude scale, (C2) occupational information, (C4) planning (marginal), and (C5) problem solving; and at Service School C for the (A1) attitude scale (marginal). Some scores showed significant decreases. Service School D for scale C2 and Comparison School F for scale C4.[21] At the service schools 66% of the scale scores increased, changing in the predicted direction, while in the comparison schools 50% of scale scores increased. Service School D, the "best" school academically, scored highest on all scales, thus pointing up the documented relationship between academic achievement and career maturity.[22]

A further analysis compared posttest scores of Service School B, where the most pre to post changes occurred (the most effective program, presumably) with posttest scores in Comparison Schools

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20. If a student was posttested during May 1976 (last year's posttest) that score was used as this year's pretest score.

21. Correlated t tests. Service School B: (A1) $t(23)=2.57$, $p<.02$; (C2) $t(22)=3.35$, $p<.01$; (C4) $t(15)=1.81$ $p<.10$; (C5) $t(15)=2.33$, $P<.05$. Service School C: (A1) $t(27)=2.0$, $p<.10$. Service School D: (C2) $t(13)=-2.23$, $p<.05$; Comparison School F: (C4) $t(13=-2.47$, $p<.05$

22. Op. cit., Crites, 1973(b).

Table 10

Mean Pre and Post CMI Scores For All Project Schools

Scales	Schools																	
	Service A			Service B			Service C			Service D			Comparison E			Comparison F		
	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD	n
A1																		
Pre	30.2	6.5	25	28.6	8.6	24	25.9	7.7	28*	34.1	4.9	14	25.6	4.2	11	32.4	8.2	15
Post	31.0	5.8	25	31.5	8.7	24**	28.2	6.4	28	35.1	7.1	14	27.4	4.6	11	34.8	7.4	15
C1																		
Pre	11.3	3.7	22	10.3	3.9	23	8.4	4.2	28	12.5	3.7	14	11.1	4.7	11	10.9	4.6	14
Post	10.7	4.8	22	10.3	4.4	23	9.6	4.9	28	12.4	4.2	14	9.3	4.6	11	12.1	4.8	14
C2																		
Pre	12.1	4.6	21	11.7	3.0	23	9.8	4.6	25	14.4	3.2	14**	12.3	2.8	11	12.0	4.6	14
Post	10.8	5.6	21	13.8	3.7	23***	11.2	5.5	25	10.3	7.4	14	11.4	4.8	11	14.1	3.8	14
C3																		
Pre	12.1	4.4	20	11.9	2.8	16	9.3	3.6	24	11.6	3.2	13	11.6	4.5	11	12.9	4.6	14
Post	11.0	4.4	20	12.3	2.9	16	10.8	3.8	24	13.0	3.4	13	11.3	3.9	11	13.9	2.9	14
C4																		
Pre	11.5	4.4	20	10.6	5.5	16	9.6	4.5	22	13.7	3.2	12	10.0	4.9	10	12.9	3.7	14
Post	11.3	4.9	20	12.5	3.9	16*	11.0	5.5	22	12.5	5.9	12	10.2	4.7	10	9.9	4.7	14
C5																		
Pre	6.9	3.6	20	7.6	3.3	16	7.6	3.6	23	9.0	3.9	12	7.8	4.4	10	8.9	2.8	14
Post	7.5	3.3	20	9.6	3.2	16**	8.0	2.9	23	8.7	4.3	12	7.0	4.2	10	8.7	3.4	12

Note. Scales: Attitude (A1), Self-Appraisal (C1), Occupational Information (C2), Goal Selection (C3), Planning (C4), Problem Solving (C5).

For correlated t test *p<.10, ** p<.05, *** p<.01

E and F. To statistically equate these three intact groups, in order to control for differences between them at the outset, the posttest scores were compared using an analysis of covariance. The analysis compared the three schools on all six scales (see the Appendix for these analyses). The results of these comparisons yielded significant differences between posttest means as follows: Service School B was significantly higher than Comparison School F on the C4 scale (planning), and significantly greater than Comparison School E on the C5 scale (problem solving). [23] Thus, the primary change observed in the pre to post comparisons hold up in the between school comparisons. That is, the service school that shows change using the CMI, is Service School B.

The changes observed using the CMI, both pre to post and between schools, are less than anticipated. Some support for the impact of the programs using the CMI as a criterion was found in Service School B where statistical differences in the predicted direction were observed. Service B did in fact have a very high career counseling activity rate, a broad range of activities as classified under the career maturity counseling objectives, and the least amount of "other" activities nonrelated to career maturity objectives (see Tables 1, 2 and 3). However, considering the extensive efforts by counselors, we would have expected greater changes at other schools

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23. Analysis of covariance: Adjusted means for scale (C4) Service B=12.91 vs. Comparison F=8.84, $F(1,36)=10.92$ $p<.005$; for scale (C5) Service B=9.62 vs. Comparison E=7.00, F $(1,36)=5.35$ 1.36 $p<.05$.

as has been observed with other career education and career counseling efforts.[24]

A number of factors were considered to account for this weak effect:

a) Statistical anomalies. The tremendous heterogeneity among students within any group and the small sample sizes contribute to a condition in which it is difficult to show statistically significant differences between measures.

b) Critical stages in development. Perhaps the disabled students we are working with--poor in academics and generally from working class backgrounds--have missed some critical developmental activities, thus making it more difficult to acquire a new vocational perspective and to achieve.

c) Broad career development vs. narrow occupational growth. The OCP program as implemented by the interns may not include enough generic and didactic information pertinent to the career development process. Although the objective was to provide students with a developmental experience, counseling contacts may have been too problem-centered and narrow to lead to the broad generic development that would have shown up on the CMI. In fact, the school with the

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24. Flake, M.H., Roach, A.J. & Stennid, W.F. Effects of short term counseling on career maturity of tenth grade students. Journal of Vocational Behavior, 1975, 6, 73-80. Omvig, C.P., Tulloch, R.W. & Thomas, E.G. The effect of career education on career maturity. Journal of Vocational Behavior. 1975, 7, 265-273.

least "other" activities was the only one that showed change on the CMI.

d) At least one of the project staff has serious doubt that a multiple choice device, such as the CMI, has real value when used quantitatively. As with almost any effort to measure attitude and rather abstract and complex mental processes and judgments, the CMI contains its share of items and response choices that can be interpreted in more than one way and that may have more than one right answer. In addition, there are problems of geographic and subcultural differences, as well as problems of reading comprehension, that diminish the validity of the CMI for the particular populations we have been working with.

Further research which we hope to undertake will deal with all of the above issues. The results we have obtained using the Career Interview form, which will be considered next, will provide some support for the interpretation related to broad career development vs. narrow occupational growth.

D. The Career Interview

The Career Interview, in the form of a questionnaire but administered orally by the counseling interns, was used to learn about the vocational perspectives of students (see the Appendix for a copy of the form). The results of the interview were also used by the project team to assess changes in the way students thought about work and entrance into an occupational milieu. The questions, though simply constructed and direct, were formulated to correspond to the constructs underlying the five scales of

the CMI. However, as opposed to the CMI, our goal with the interview was to allow students to demonstrate their career maturity in relation to their own occupational aspirations and in language derived from their own experiences.

The opening question of the Career Interview asks for occupations the students are interested in (up to three). The remaining seven questions and the CMI constructs they represent (indicated in brackets) are given below:

1. Tell me what led you to make these choices. Is there anything about yourself that led you to make this choice? [Self-Appraisal]
2. Tell me what does a person do in each of these jobs? [Occupational Information]
3. Tell me what you know about how a person goes about becoming a____? [Planning]
4. What would you do if someone advised you that you would not get into the school or training program you wanted? [Problem-Solving]
5. What would you do if your parents told you the jobs you picked were not for you? [Problem-Solving]
6. What would you do if you could not decide on what career you wanted to choose? [Problem-Solving]
7. What would you do if you found out there was not enough money to complete your schooling? [Problem-Solving]

The Career Interview was administered by counseling interns in the Fall (October 1976) and then again at the end of the Spring term (May 1977). Independent testers were used to carry out the

interviews in the Comparison Schools. It is recognized that the data collection by interns at the service schools could lead to a bias in the type of information obtained. Students might try to offer counselors whom they knew and liked the answers they thought the counselors wanted. Counselors on the other hand could subtly probe to produce a good posttest answer demonstrating how effective their work was. These methodological concerns are legitimate, and the project team did try to counter these problems by asking counselors to record only what students actually said as well as down-playing the extent to which the interview results would reflect on the counselors' competence. Furthermore, as will be seen, the differences between Service and Control Schools, especially in the comparison of the quality of answers at the end of the project year, appear too substantial to be accounted for solely by a data gathering bias.

For descriptive purposes and to provide some reference point for our discussion of the Career Interview a sample of occupations chosen by students will be presented. For evaluative purposes we will compare on a pre to post basis the number of occupations chosen by students and the number of reasons given for choosing these occupations. In addition, we will also examine on a pre to post basis the qualitative differences in responses made to questions on the Career Interview.

The occupations chosen by students from one of the project schools is presented in Table 11. The occupations listed by

Table 11

Typical Patterns of Occupations Chosen by Students

Field	Social Services	Business Contact	Organization	Technology	Outdoor	Science	General Cultural	Arts and Entertainment
Levels	I	II	III	IV	V	VI	VII	VIII
1	Psychologist			Inventor		Psychiatrist		Writer Singer Artist
2	Rehabilitation Therapist Social Worker		Accountant Politician	Architect	Forest Ranger	Nurse	Teacher Lawyer	Musician
3	Camp Counselor Community Worker	Business	Bookkeeper Shopkeeper Secretary	Specialized Technician		Lab Technician		Radio Announcer
4	Child Care Worker Chef Policeman		Secretary Cashier	Comp. Tech. Carpenter Mechanic Electronics				Racing Car Driver Cartoonist Photographer Advertising Artist
5	Mailman Telephone Op. Delivery Boy Taxi Driver Housekeeper Beautician		Clerk	Truck Driver Bus Driver				Arts and Crafts
6	Guard Hospital Attendant							

students were categorized according to Roe's field and level classification system.[25] Some occupations were chosen more than once. The information presented in Table 11 was gathered during the first year of the project but is representative of choices made this year and is repeated to make explicit the occupational aspiration of handicapped students. As can be seen, occupational choices range across many fields and are pegged at different status and training levels.

To estimate changes in students as reflected by the Career Interview we followed a strategy used last year. This involved tabulating and then comparing changes in number of occupations and in the reasons given by students for choosing these occupations. We assumed that students are more vocationally developed if they can cite a greater number of occupational options (up to a point) and give more reasons for their choice. This reasoning is consistent with the project objectives to widen the number of options disabled students consider to counter existing societal constraints. We do acknowledge that in specific cases a narrowing of choice would be a sign of growth.

The mean number of occupations chosen by students at each school is given in Table 12. The mean change from the pre-interview to the post-interview is also given. (For this comparison and all other pre to post comparisons in this section, data were included only for students who completed the interview in both Fall and Spring.) Although there is the potential for a ceiling effect (a maximum of three occupations were asked for) the statistical

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25. Roe, A. The psychology of occupations. New York: Wiley, 1956.

comparisons of the mean changes in occupations favor the Service Schools. This result is due primarily to a decline in the number of occupations named in the Comparison Schools. The particular comparisons in which statistically significant differences were observed were as follows: Service B greater than Comparison F, Service C greater than Comparison F, and Service D greater than Comparison F.[26]

Table 12

Number of Occupations Chosen in Fall and Spring (Pre and Post)

School	N	Number of Occupations					
		Fall		Spring		Change	
		M	SD	M	SD	M	SD
Service A	16	2.56	.73	2.38	.72	-.19	1.05
Service B	24	2.75	.44	2.75	.61	.00	.66
Service C	17	2.82	.39	2.88	.33	.06	.43
Service D	14	2.57	.51	2.57	.65	.00	.68
Comparison E	11	2.18	.75	2.09	.70	-.09	.70
Comparison F	14	2.93	.48	2.36	.74	-.57	.76

26. The conditions for performing an analysis of variance using the mean difference scores were not met; the variances were not homogeneous. However, t tests for independent means were undertaken but only between groups where relationships were predicted in advance. The results were as follows: Service B > Comparison F t (36) = 2.44, $p < .02$; Service C > Comparison F t (29) = 2.92, $p < .01$; Service D > Comparison F t (26) = 2.11, $p < .05$ (all tests 2-tailed).

A second variation on comparing the number of occupations given on a pre to post basis appears in Table 13; this comparison also favors the Service Schools. Table 13 describes the combined total number of different occupations given by a student on the pre and post interviews. For example, if a student listed the occupations of accountant, bookkeeper, and lawyer in the Fall, and accountant, legal secretary, and cashier in the Spring, that would yield a total of five separate occupations cited by a student. Thus, total number of occupations gives a more accurate view of all the occupations the student may have talked to a counselor about. A comparison of means in Table 13 favored the service schools with the following showing statistically significant differences: Service School B

Table 13

Total Number of Different Jobs Given
in Both Pre and Post Interviews Combined

Schools	N	Number Different Jobs	
		M	SD
Service A	16	3.25	.68
Service B	24	4.08	.97
Service C	17	4.24	1.09
Service D	14	3.57	1.16
Comparison E	11	2.46	.69
Comparison F	14	3.79	.98

greater than Comparison E, Service School C greater than Comparison E, Service School D greater than Comparison E.[27]

Finally, the last comparison involving quantity of responses dealt with the gains in number of reasons given from the time of the pre-interview to time of the post-interview. Our rationale again as stated was that the more reasons an individual could cite for an occupational choice the greater the amount of vocational development. Therefore, we predicted more increases in the number of reasons given in the Service Schools as compared to the Comparison Schools. Table 14 summarizes the number of reasons given by schools on a pre and post basis; the mean changes from the pre-interview to the post-interview favor the Service Schools.

Table 14

Mean Number of Reasons Given for Occupational Choice

Schools	N	Number of Reasons					
		Pre		Post		Change	
		M	SD	M	SD	M	SD
Service A	16	5.62	2.28	5.25	2.18	-.38	3.10
Service B	24	5.42	1.93	5.58	2.17	.17	2.18
Service C	17	6.06	1.89	6.53	1.42	.47	1.66
Service D	14	4.86	1.99	5.43	2.10	.57	2.74
Comparison E	11	4.55	2.54	4.18	2.44	-.36	2.34
Comparison F	14	7.50	2.38	4.36	1.60	-3.14	2.21

27. These comparisons were outcomes of a one-way analysis of variance: $F = (5,90) = 6.28$, $p < .001$, followed by Dunnett's test for comparisons involving a control mean with the following results: Service B > Comparison E, $p < .01$; Service C > Comparison E, $p < .01$, Service D greater than Comparison E, $p < .05$.

Statistically significant differences are in large part due to a decline in reasons given at Comparison School F and occurred between the following schools: All Service Schools (A, B, C, D) greater than comparison School F.[28]

In summary, the majority of comparisons using quantity of response on the Career Interview as criteria favor the Service Schools. The results support the notion that Service School students were "mulling over" with a counselor a goodly number of occupations as well as exploring both the intrinsic and extrinsic reasons for their choice. The differences observed between the Service and Comparison Schools were not startling, perhaps in part due to a ceiling effect imposed by the phrasing of some questions.

The most telling comparisons between schools, however, are not quantitative but qualitative, involving differences in what students said in response to each of the seven Career Interview questions posed and how these answers changed over time. This comparison will be considered next.

A rating procedure was undertaken to compare qualitatively the answers students gave on both the pre and post interviews. This was done by selecting only those interviews where students made an occupational choice that was the same for both pre and post interviews. Seventy-seven such pairs of interviews were thus selected. Our objective was to determine if students' self-awareness,

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28. Comparisons made using t tests for independent groups, see footnote No. 19. Results were as follows: Service A > Comparison F t (28) = 2.76, $p < .01$; Service B > Comparison F t (36) = 4.49, $p < .001$; Service C > Comparison F t (29) = 3.61, $p < .001$; Service D > Comparison F t (25) = 3.94, $p < .001$.

knowledge, planning, decision making, and problem solving in relation to the same occupation changed from the pre to post interview.

The pairs of answers from the interview were given to a rater who is knowledgeable in vocational development theory. The pre or post interview could not be identified nor could the school from which the pairs came. Pairs of answers and the order of presentation of any one pair--which was pre and which was post--was presented randomly. The rater's task was to compare each member of the pair on each question representing each career maturity construct--self appraisal, occupational information, goal selection, planning, and problem solving. (See questions earlier in this section.) The ratings were relative ones, that is, the rater indicated which member of the pair was a better or more mature answer from a vocational development point of view. Provision was also made for rating answers as equal.

It was predicted that the post-interview answers to questions would be rated better than the pre-interview answers to questions. In addition, we expected a greater number of positive post-interview ratings in the Service Schools than the Comparison Schools. This is, in fact, what we found, thus offering the strongest support to date of the impact of the OCP program. The specifics of the results are delineated below.

Answers to questions which were rated as equally good were dropped from subsequent analyses. It should be noted though that the Comparison Schools in general tended to have more pairs rated as equal than the Service Schools. The results obtained in analyzing the remaining pairs--those that did change--appear

in Table 15. This Table is read as follows: the large letter N represents those pairs of answers for each question that showed rated change from the pre to post interview; the designation n+ (plus) indicates the number of post-interview answers rated as better or more positive than the pre-interviews answers; finally, p (probability level) represents the probability of the indicated occurrence of positive post-interview ratings relative to chance.[29] Using the criterion level of $p < .05$ it can be seen that the Service Schools show a significant post-interview effect on a majority of questions (15 out of 28, $p < .05$, with an additional 5 questions marginal, $p < .10$). This is not the case for the Comparison Schools, where the post-interview effect occurs in only 2 out of 12 instances. The Service Schools combined versus the Comparison Schools combined also show the marked differences found in examining all the schools independently. The effect ($p < .05$) is observed in 7 out of 7 cases for the Service Schools but in only 1 out of 7 cases for the Comparison Schools.

Using the Career Interview as a criterion measure the Service School students showed gains in career maturity in reference to their own occupational aspirations. Development was on all dimensions examined--self-appraisal, occupational information, goal setting, planning, and problem solving. It appears, then, that career maturity can be specific to one's expressed vocational choice as well as broad-based and generic as measured by the CMI. Whether the disabled students we worked with and disabled students in general need

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29. These probabilities were calculated using a Sign Test (one-tailed) See Siegel, S. Non Parametric Statistics for the Behavioral Sciences. N.Y. McGraw-Hill, 1956.

Table 15
Comparison of Qualitative Changes in Responses to Career Interview

		Questions						
		1	2	3	4	5	6	7
Experimental Schools								
Service A	N	12	12	12	9	6	7	8
	n+	10	11	10	7	5	5	7
	p	.019	.003	.019	.090	.109	.227	.035
Service B	N	14	14	12	14	12	13	15
	n+	10	12	11	12	10	9	15
	p	.090	.006	.003	.006	.019	.133	.0001
Service C	N	10	10	9	11	10	9	11
	n+	8	9	9	9	7	6	7
	p	.055	.011	.002	.073	.172	.254	.274
Service D	N	9	7	10	10	8	8	8
	n+	9	7	10	8	5	5	8
	p	.002	.008	.001	.055	.363	.363	.004
Total Service Schools	N	45	43	43	44	36	37	42
	n+	37	39	40	36	27	25	37
	p	.0001	.0001	.0002	.0001	.0023	.0244	.0001
Comparison Schools								
E	N	8	7	6	6	5	4	3
	n+	5	5	2	2	4	3	3
	p	.363	.227	.344	.344	.188	.250	.000
F	N	7	8	5	5	5	8	7
	n+	5	6	3	2	3	7	4
	p	.227	.145	.500	.500	.500	.035	.500
Total Comparison Schools	N	15	15	11	11	10	12	10
	n+	10	11	5	4	7	10	7
	p	.151	.059	.500	.274	.172	.019	.172

Note: Probability levels are for one-tailed test.

Constructs corresponding to questions are as follows: 1 = self-appraisal, 2 = occupational information, 3 = goal selection, 4 = planning, 5 = problem solving. z- scores calculated for the larger sample in the Service Schools (total) they are as follows with respect to questions 1-7: 4.18, 5.18, 5.49, 4.07, 2.83, 1.97, 4.78.

a more high-powered career counseling experience to lead to broad-based changes in career maturity is still not clear.

Perhaps, however, individuals develop vocationally in a more natural way by understanding the career maturity dimensions attendant to the small cluster of occupations they are interested in. This may be a more realistic way to increase vocational development since one's own choice provides the motivation for the vocational exploration process. Gains in general career maturity may actually be artificial and forced outcomes of teaching to the test, so to speak. Career education efforts may, therefore, generate outcomes more suitable for measurement on the CMI. Career counseling outcomes which tend to be problem- and self-centered may need to be measured by more specific and tailor-made measures, as was done here.

APPENDIX

Career Interview Form (Blank and Actual Completed One)
Counselor Activity Guide: Career Maturity Categories
Counselor Activity Report Form
LINK: Newsletter for Parents (Excerpts)
Counselor Guide for Student Information Form
Analysis of Covariance

YOUR CHOICES Name 3 occupations you are considering as a career: 1) Still	REASONS FOR YOUR CHOICES Now tell me what led you to make these choices? Is there anything (else) about yourself or the job that led you to make this choice? (Is there anything else? Can you tell me more about that? Are there any other reasons?)	WHAT DO THEY DO? Now tell me what does a person do in each of those jobs? (Can you tell me more about that? Would you explain that a little bit more? Is there anything else?)	HOW DO YOU SEE THEM? Now I'd like you to tell me what you know about how a person goes about becoming a _____. (Is there anything else? Can you tell me more?
Your first choice: _____ _____	Reason 1: _____ Reason 2: _____ Reason 3:	[illegible] taking x rays.	[illegible]
Your second choice: _____ _____	Reason 1: my father owns [illegible] Reason 2: _____ Reason 3:	[illegible]	[illegible]
Your third choice: _____ _____	Reason 1: [illegible] Reason 2: _____ Reason 3:	[illegible]	[illegible]

1. What would you do if someone advised you that you would not be able to get into the school or training program you really wanted?

I'd say, ask them if there would be any spaces for me the following year. I'd ask them why. And if they didn't have any other schools, I'd ask them to look around for me.

2. What would you do if your parents told you the jobs you picked were not for you?

I'd tell them I know they're for me and I like the job that I'm at and that's that, and don't say they aren't.

3. What would you do if you just could not decide what career you wanted to choose?

I'd stay home.

4. What would you do if you found that there was not enough money to complete your schooling?

I'd save enough money myself, until there was.

YOUR CAREER CHOICES Name 3 occupations you are considering as a career:	REASONS FOR YOUR CHOICES (1) Now tell me what led you to make these choices? Is there anything (else) about yourself or the job that led you to make this choice? (Is there anything else? Can you tell me more about that? Are there any other reasons?)	WHAT DO THEY DO? (2) Now tell me what does a person do in each of these jobs? (Can you tell me more about that? Would you explain that a little bit more? Is there anything else?)	HOW DO YOU GET THERE? (3) Now I'd like you to tell me what you know about how a person goes about becoming a _____. (Is there anything else? Can you tell me more?
Your first choice: _____ _____	Reason 1: Reason 2: Reason 3:		
Your second choice: _____ _____	Reason 1: Reason 2: Reason 3:		
Your third choice: _____ _____	Reason 1: Reason 2: Reason 3:		

(4) What would you do if someone advised you that you would not be able to get into the school or training program you really wanted?

(5) What would you do if your parents told you the jobs you picked were not for you?

(6) What would you do if you just could not decide what career you wanted to choose?

(7) What would you do if you found that there was not enough money to complete your schooling?

(8) One final question. What kind of jobs do members of your family have? (primarily mother and father but could also be guardian if not living with parents)

S Name _____

S # _____

School _____

Date _____

I Name _____

Counselor Activity Guide
Career Maturity Categories

Intents

A1 -- To have a student favorably disposed to:
a) moving into the world of work and making a career choice.

C1 -- To have a student learn something about her/himself, e.g., needs, interests, abilities, likes and dislikes.

C2 -- To have a student learn something about jobs and occupations, e.g., job duties and tasks, employment opportunities or occupational roles.

C3 -- To have a student relate what one knows about her/himself (C1) with what that student knows about jobs and occupations (C2) so as to choose (decide on) an occupation.

C4A-- To have a student outline those steps necessary to achieve a career objective.

C4B-- To have a student complete those steps necessary to achieve the career objectives.

C5 -- To have a student seek solutions to dealing with barriers which thwart his/her movement toward a career objective.

Counselor Activity Report Form

Date	A1	C1	C2	C3	C4A	C4B	C5	Other

Note: Sketched above is a facsimile of the counselor's activity report form (actual width 28 inches). All activities with students were classified as to intent with reference to the Counselor Activity Guide reproduced on the preceding page. A description of the specific intent, activity, and outcome for a student were then entered in the appropriate columns. The form therefore serves as an indexed log.

NEWSLETTER EXCERPTS - FOUR SCHOOLS

L I N K : NEWSLETTER FOR PARENTS

(Names of Schools and Participants have been deleted in accordance with Board of Education Guidelines.)

Published by the Institute for Research & Development in Occupational Education, Center for Advanced Study in Education, Graduate School & University Center, CUNY, under the State Education Dept., Division of Occupational Education Supervision, Grant #VEA C76-68-749

Vol. 2, No. 3 June 1977

FROM YOUR EDITOR

We hope you have enjoyed receiving LINK and it has helped you to keep in touch with your child's school activities. The entire staff values the friendships we developed with your children and enjoyed meeting you, their parents. We hope our graduates will keep us informed about their new activities. Please call us at our office at the City University (221-3532) if you have any suggestions on how we can better serve you and your child. Have a happy, healthy and active summer and we hope to see you again in the Fall.

FOR YOUR INFORMATION

HELPFUL HINTS---DRIVING

If you are planning to buy a car, discuss driver's training with your rehabilitation center or a reputable driver education school.

If you need prosthetic accommodations, consult your rehabilitation center and car manufacturer.

Special devices, including hand controls, may be very costly. The State Office of Vocational Rehabilitation or an insurance company may help with financing. Also, there are a whole group of medical deductions, based on a number of favorable tax rulings, that relate to your car and various transportation expenses.

Deductible medical expenses

*Hand controls, cost of installation and equipment.
*Mechanism to lift you into the car.
*Specially designed car to accommodate you and your wheelchair.
*Note: The cost of power steering is not deductible.
*Medical transportation: $.07 a mile, plus parking fees and tolls if car used for medically necessary transportation.
*Keep a record of the medical purpose of the trip, for instance doctor and hospital, and the mileage.

MAYOR'S OFFICE FOR THE HANDICAPPED ON THE AIR

WNYC-AM "One Out of Nine: Focus on the Handicapped"
Thursdays, 8:30-8:55 p.m.
Eunice Fiorito, Director
Mayor's Office for the Handicapped

Interview Program on issues facing disabled persons, new legislation, programs and agencies offering services, the disabilities themselves and the activities of the growing disabled rights movement.

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TELEPHONE SERVICE

Many kinds of phones are available that are easy for disabled persons to use. Telephone hookups can also be used to connect a disabled person's home with school. Call the Business Office of your local telephone company for information. Some specialized phones are also available from private companies.

NEWSLETTER EXCERPTS - FOUR SCHOOLS

RECREATION

The New York City Department of Recreation conducts free recreation programs for handicapped residents of the City on a year round basis.

These involvements are specifically designed to meet the recreational needs of handicapped individuals who, due to the nature of their disabilities, cannot participate in regular on-going recreation.

HANDICAPPED NEW YORKER'S GUIDE TO FREE EVENTS is published seasonally, with accessibility data for entrance, bathrooms, parking, terrain at parks, museums and other public places.

For information: Call 472-1003

For a complete recording of the day's events call 691-5858 in Brooklyn, Queens and Staten Island
755-4100 in Manhattan and Bronx

* * * *

TRAVEL GUIDES
A List of Guidebooks for Handicapped Travelers and Highway Rest Area Facilities Designed for Handicapped Travelers. Both are free. Write to: President's Committee on Employment of the Handicapped, Washington, D.C. 20210

The Department of Consumer Affairs conducted a telephone survey to determine the accessibility of a number of sports and sight seeing facilities in NYC. Call the numbers listed below in order to obtain the specific information you need before you visit these places. They can be accessible. Have fun!

Madison Square Garden	563-8146
(Call after 3:00 p.m.)	563-8000
Shea Stadium	672-2000
Yankee Stadium	293-4300 Ext. 306
Circle Line	563-3200
Day Line	270-5151
United Nations	754-7713
World Trade Center	466-7397

Jones Beach has front row parking spaces reserved for vehicles of disabled passengers. Ramps give direct access to snack bars, locker rooms, rest rooms.

Most of the information above is from CONSUMER RIGHTS FOR THE DISABLED published by the Department of Consumer Affairs, 80 Lafayette Street, New York, N. Y. 10013. Send $2.00 for this very informative publication.

LINK is a newsletter for parents of physically disabled students at High School, Published by the Institute for Research & Development in Occupational Education, CUNY, 33 West 42 Street, New York N.Y. 10036.
Project Directors: Dr. Leo Goldman
Dr. Bert Flugman
Editor/Coordinator: Diane Sivon
Assistant Editor: Gloria Davis

My Trip to Lehman College

On April 19, several students and I took a trip to Lehman College with our career counselor

We went to Carmen Hall where we met Mr. Jennings and Dr. Lahn. They showed us a slide show of the campus. A student guide talked to us about the courses that one can take. Later, we went on a tour of the campus to see several classes and the library. We also saw their big baseball field, where students were playing baseball. Many students were sitting outside on the benches and on the grass, studying and talking.

I learned that college is different than high school. Students have the freedom to choose the courses that they want to take. This is more comfortable for the student and helps him work more. I want to go to college. Although Lehman is not my choice (because it does not have a Business Administration major), I hope that the college I do go to is similar to Lehman College.

A STUDENT

NEWSLETTER EXCERPTS - SCHOOL A

FROM YOUR CHILD'S TEACHER

Another school year is drawing to a close. All of us will find a little shade to escape the hot summer days of the city. Perhaps there will be changes in the routine of our students this summer. We, at have been trying very hard to build more independent attitudes in our class. It is important for your child to develop feelings that he/she can be self-reliant. If our students have a positive outlook about themselves they can then change the incorrect ideas others have about physically disabled people.

Our career counselors, began a new method of helping our students. It is called the "Case Conference." During these conferences, the whole staff who works with each child (Health Teachers, Speech Teachers, Physical Therapist, School Nurse, CUNY Counselors and the student's subject teachers) meets like a team to discuss an individual. The student's achievements and shortcomings are discussed from each staff member's point of view. At the end of the conference each member of the team has a better understanding of the student and can help the student use his/her abilities to their fullest.

SPRING ACTIVITIES

May 20.....Open House
May 27.....Class Picnic
June 1,2,3.....Exams
June 10.....School Picnic
June 14.....Last day of classes
June 15.....Senior Luncheon
June 17-23.....Regents
June 27.....Graduation

FROM YOUR CHILD'S PHYSICAL THERAPIST

As a physical therapist in the health class, I work with your children in carrying out their doctor's orders concerning physical rehabilitation. This may include specific strengthening exercises, transfer activities from a wheelchair or practice with braces and crutches. We also spend time working together to insure better overall health care. This means arranging for regular medical check-ups at the student's treatment agency, keeping track of any medication they may need and arranging for equipment adjustment, repair or replacement. In short, I encourage the students to begin assuming the responsibility for their own health care. You can help greatly by encouraging follow-through of these important habits.

FROM YOUR CHILD'S COUNSELORS

On Sunday, April 24, we were very happy to meet parents and students for a Spring celebration. We celebrated with food and drink, but the highlight was the Career Graduate Panel--

The Panel provided us with valuable information through their own personal experiences. They had a dream about what they wanted to do after high school. It took planning and coping with interruptions and change. They left us with the feeling that if you really want something, whether it be a job or college, you can get it.

One parent remarked that she wished all of our parents could experience this feeling with their sons and daughters. We talked about the possibility of starting a parent group, where you could discuss your individual concerns and your son's or daughter's future concerns. Is anyone interested?

Many thanks to the members of the Graduate Panel for letting us share in your lives. We hope that we can all benefit from each other again in the future.

Have a relaxing summer.

SUMMER JOBS

The following students obtained summer jobs through the Board of Education's Placement and Referral for Handicapped Students:

NEWSLETTER EXCERPTS - SCHOOL A

FROM YOUR CHILDREN

A BIG CHANGE

Hello. My name is and I am a new student. Well, not that new, it's my first year in high school. There are a lot of problems that we all face. When I say all, I mean the teachers too. One problem that I face is the fact that I'm only 13. That is kind of young to be in high school. You are probably wondering why the title is "A Big Change." Well, that is because ever since I was in third grade I wanted to become a teacher. Even when I entered high school, that was my dream. On April 24 at the Student/Parent Career Meeting one of the panel speakers suggested that if you find something really impossible, don't do it. There is always something that you can do and be good at doing it. I've always been a very active person and I love to help people. Now I put the two things together and came up with recreation worker. I am going to join the United Cerebral Palsy Club in September and eventually volunteer working with the people there. After that, I want to get a degree at college in recreational work. And that is A BIG CHANGE!

A STUDENT

GAINING A NEW FRIEND

There are two career counselors and a physical therapist who come to our class three times a week. Their main goal is to help the student know himself and help him get a better view of what he can do within himself. For instance, if a student feels angry or sad, the counselor tries to cheer him up or aid him in any way possible. They are friends who help us plan for our future after high school. They are really a nice group of people who try to understand our handicapped world. They give a hand to the ones who cannot make it or cope with it. They planned a human awareness group for some of the students in the class that want to know more about themselves. They like everyone to attend this group. The students who are outgoing give a helping hand to the ones who are shy. The open students help the others by explaining things that they can do, without being closeminded about their handicap. They are here for whomever needs them. They are our friends, who want to be friends, too.

A STUDENT

A FAVORITE POEM

There must come a time
In everyman's life
When he is uplifted to the stars
Because of something he does
With all his heart and soul.
It does not matter
Whether this lasts
For a man who lives
Even one hundred years
Who has not been uplifted
Even one second,
Dies stillborn...

A POET

PEACE IN MY EYES

Peace in my eyes is a dove flying free and wild. Spreading happiness and joy around the world; With his wings. And other wonderful things. Where no wars are fought. Only where brotherhood and love are taught.

A STUDENT

A STUDENT

TRIP TO WTFM

On our second visit to WTFM on Thursday, April 21st, we asked the employees there many questions. What follows is some of those questions and the answers we received.

1) How did you break into the radio business?

Ms. Winters, for example, an Assistant to the President started as a teacher and then resigned to go to CBS. There she started from the bottom in the secretarial pool and worked her way up. Ms. Rosen, Assistant Music Director, majored in music in college and then applied for her job and got it.

2) Are there any jobs where people work alone?

Yes, some people do some of their work alone, but everyone relies on one another.

3) What exactly does a radio technician do?

He/She makes sure all the equipment in the studio goes right.

4) Do you find your work interesting?

Yes!

5) What kind of work does the receptionist do?

She/he works from 9 a.m. to 5 p.m., 5 days a week. The receptionist does typing and takes dictation and must know stenography. They also answer the telephone switchboard. A receptionist usually needs a high school diploma, typing, and steno skills, and gets on the job training.

6) What is the salary range?

Salaries start at $150 for receptionist $175 for assistant music directors, and $200 for announcers per week.

7) What is payola? Is it very common?

Payola is when someone is paid under the table for special favors, like playing one record more often than others. It rarely happens, except possibly with rock stations, and it's a situation where one person can spoil things for many people. It's highly illegal and really frowned upon.

At WTFM we met the Assistant to the President, General Manager, Receptionist, Assistant Music Director, Assistant to the Assistant Music Director, Announcer, Studio Supervisor, Radio Engineer and Community Affairs Director.

###

FROM YOUR CHILDREN

In order to get the most out of each field trip and speaker, the counselors encouraged the students to prepare questions in advance. This way the students could be sure their most important questions would be answered. Here, for example, are the questions that prepared to ask Mr. Jerry Jones, the radio announcer at station WTFM.

1) Can we listen to WTFM on our radios at home?
2) If there is a big snow or rain storm must you come in to work?
3) How late does each person stay at the radio station?
4) How many years have you worked here?

THE DEATH OF THE LONG ISLAND PRESS PAPER

I am sorry to hear that the Long Island Press paper closed for good. It kept the people of Jamaica, N.Y. informed on news about people living on Long Island. It was well written, interesting and an inexpensive paper. It was also easy to read.

Unemployment will rise because of the layoff of the many people who worked for the Press.

It published a contest every Sunday. I have won many of them. It also published two contests every week day. I have won one of the but not the other. I wish some of the other papers were written like the Press.

The reason of its death was because there was too much competition between the other well-known papers of New York City. Also, the people of New York couldn't pay the prices of the rising inflation.

A STUDENT

MY BEING IN THE HEALTH CLASS

Being in the Health Class is a lot of fun. We (my fellow classmates and I) get to play checkers and chess during official, study and lunch periods. We get to go on trips every now and then with our official teachers, and with our career counselors, They help us find out what we can do after graduation, or if we already know what we want to do, they help us choose the right school to go to. We have parties for certain occasions. The one thing I don't like about being in a Health Class is that we are treated somewhat differently. Also, we don't get to participate in certain activities such as gym or gym-related activities. I myself like to play basketball (in a wheelchair) and I've had six months of Judo. I also enjoy lifting weights. I have a lot of friends in the Health Class and I asked one of them to help me express my views. Here's her comment:

"I like the Health Class a lot. One thing I like is the children in the class. I knew a lot of them when I was in Junior High School. Another thing I like is the fact that I get school bus transportation every morning. It's good to go to school on a school bus because when the weather is bad I don't have to walk down the hill to catch the city bus. It really made me sick but now I don't have to. I don't think anything should be changed. I like it just the way it is. --

One other thing I would like to mention is the elevator service. It's nice to have, but sometimes it can be a problem since only one is working. Someone should get the other one fixed so we don't have to crowd into one elevator. I hope the people who may have some concern about this problem will help solve it so being in the Health Class can be made better for those of us who have to be there.

A STUDENT

POETRY CORNER

Broken down, rotten, polluting cars.
Drunks, drinking, fighting at corner bars,
fighting, destroying, trouble-making gangs.
All you hear are gunshots and bangs.
Litter rats everything is rough, teenagers
in streets thinking they're tough;
gasoline, matches, starting up fires;
burned down buildings, nothing to admire.
For smog, all kinds of smoke,
New York City is no longer a joke.
Problems of the world,
inflation and pollution,
I'm telling you people,
it's time for a solution!

A STUDENT

When the sun sets
Upon your face,
You're the prettiest thing
In the whole human race.

I'll stay with you
Hour upon hour,
Because you're my love
My own special flower.

A STUDENT

You know there is a across
the street
The grounds are clean and the grass
is neat.
The trees have leaves that shine
with the light
There are gates around it and tall
lamp pole lights.
People are walking from here to there
And boy, that's a lot of people,
I declare.
If you're ever in our high school
Looking down at the as if
from the sky
Enjoy the sight of the tall trees, and
green leaves as people pass you by and by

TWO STUDENTS

NEWSLETTER EXCERPTS - SCHOOL C

FROM YOUR CHILD'S TEACHERS

Dear Parents,

It has been our pleasure this year having and work with our students. They counseled the students both individually and in groups, about individual matters and the world of work. The counselors have taken our students on trips to an advertising agency, the New York Philharmonic, Sears Department Store, the Bulova School of Watchmaking and a soda factory as part of their program for increased job awareness. The students have also made visits to the local colleges. At Bronx Community College they had the opportunity to use a computer-assisted guidance terminal. There a computer tells the user some of the careers/jobs most suited for their needs and interests.
showed the class filmstrips and invited speakers to come to our class. We had Assemblyman Vincent Marchiselli, who is physically handicapped, and Debra Belsky, a blind young lady from the Mayor's Office for the Handicapped, visit us.

As you may remember, our counselors arranged a parent meeting for you to meet a representative from the Office of Vocational Rehabilitation. Coffee and cake were served and second helpings and all the extras went to our class! The parents were informed about the services they could receive from OVR. One parent found out that he could receive OVR funds and training for himself!

The students looked forward to the two days each week that each counselor would come. They would greet them in an excited manner, and a few would hug and kiss them. This was understandable because they were a joyous breath of fresh air in the daily routine. They brought a spirit of friendliness and warmth, and the students responded in kind.

We have felt fortunate this year to have these two special people. Perhaps we will be lucky and the program will be funded again and they will return in the Fall. All we can do is wait and see.

Until then, we wish you a good summer and hope to be seeing you in the Fall.

Sincerely,

FROM YOUR CHILD'S COUNSELORS

Dear Parents,

As the school year draws to a close, we would like to take this opportunity to thank you for your cooperation with our program. We know your children enjoyed our field trips and speakers, and we hope that these experiences have helped students along the way to making a decision about their futures.

We would like to say a special thanks to all the parents who came to the school and made our visit by Ms. Phyllis Cohen and Ms. Debra Belsky a success.

It has been a wonderful experience working with your children. We hope you will continue to support them through their decision making processes. Through working with their teacher we feel sure that will be glad to meet with you and your child to plan for their education and training, and to share with you their knowledge about services to which you and your child are entitled.

In closing, we would like to wish you all a happy, peaceful summer.

FROM YOUR CHILDREN

MY AUTOBIOGRAPHY

I was born May 9, 1961, in Women's Hospital in New York City. There are five people in my family; my mother, father, sister, brother and me.

When I was four years old my mother was cooking breakfast. She put a pot of grits on the table and when she turned around, I stuck my hand in the pot and burned myself.

I still have to ride the bus to to school. I hope one day I will be able to ride public transportation like my sister and brother.

I like High School very much. I met many new people and made many friends. There are a lot of people who help me in school. My best friends are my family.

My hobbies are reading, meeting new people and music. I don't like people to be angry with me. I try very hard to please everyone I meet.

I hope to finish high school and go on to college. I hope to get a good paying job.

I hope to achieve all my goals by trying very hard to do the best that I can do.

A STUDENT

NEWSLETTER EXCERPTS - SCHOOL D

YOUR CHILDREN'S CAREER CHOICES

Lawyer	Childcare Worker	Computer Technician	Photographer
Musician	Furniture Maker	Singer	Author
Nurse	Cartoonist	Draftsmen	Architect
Office Worker	Commercial Artist	Truck Driver	Biologist
Fashion Designer	Anthropologist	Archeologist	Actress
Telephone Operator	Missionary	Bookkeeper	Accountant
Watchmaker	Teacher	Buyer	Secretary
Interpreter	Printer	Dental Assistant	Social Worker
Investment Broker	Insurance Broker	Jockey	Physical Therapist

This is the list of occupations the students of the class are considering as careers. One of the things the students did was look into the qualifications needed and type of training for the occupation. As you can see, the class has a variety of interests and career choices.

If you don't already know which careers on the list are the choices of your son or daughter, maybe you would like to check with them about it!

* *

FROM YOUR CHILD'S TEACHER

I was pleased to see so many of you at the parent meeting in March. It is important for the students to know you are supporting them in their effort to search for employment.

I believe that your concern and attention will be helpful to your child in making decisions that affect their career choices.

I think the career counseling program this year started the students thinking about what career to choose. I was pleased the students had the opportunity participate in this special program.

All in all, this was a good year. I wish you all a pleasant, restful summer.

Sincerely,

* *

* *

* *

* HAVE A GOOD SUMMER ! *

* *

* *

* *

FROM YOUR CHILD'S COUNSELORS :

My year at has quickly come to an end. Quickly, because it was packed with interesting experiences for me.

The students supplied enthusiasm, honesty and intelligence to my beginning experiences as a counselor. I am thankful to them for that.

I thank for her time and patience during my work with her students. To I extend my gratitude for their helpful attention to me.

My time at has gone quickly, but it will not pass quickly from my mind as a memorable experience.

Our Health Conservation Class is one very important part of school life at under skilled direction. We find the achievement of our Health Conservation students a source of great pride.

This year we were pleased to have as a counselor/intern working in the area of career exploration. was also a vital part of our March Career Day Program.

We look forward to continued positive association with the City University for the benefit of our Health Conservation students and High School.

School Guidance Counselor

STUDENT INFORMATION

Date_____

School_____Counseling Intern(s)_____

Student Name_____Date of Birth_____Sex_____

As of 10/1/76, Age _____Grade Level____Languages Spoken_____

(1) Disability:

(a) Description of the student

Where appropriate, note functional limitations, e.g., wheelchair, crutches and braces, limited upper extremities, limited lower extremities, speech.

(2) Agency Affiliations:

(a) Past agency relationships including names of physicians, social workers, and OVR counselors.

(b) Present agency relationships, (same as a).

(c) Services received within school, e.g., speech therapy. (Include names)

NOTE: THIS SAME FORM, MINUS THE DIRECTIONS FOR THE CASE WRITER, IS USED FOR THE REPORT ITSELF.

(3) School History and Performance:

(a) Sketch of high school record to date. Include courses, grades, attendance.

(b) Academic observations (anecdotal material based on observations and conversations with student or teacher).

(4) Standardized Test Performance: (For all tests give name and date administered)

(a) Reading: Include test scores, administration dates, interpretations and comments.

(b) Math score (same as a).

(c) Other tests: (same as a).

(5) Interests: (Based on counseling interactions and vocational testing).

Avocational

(a) How does student spend spare time?
(b) Whom does student spend spare time with?
(c) What are interests of students?
(d) What are hobbies of student?

School

(a) How does student like school?
(b) What subjects are liked most?
(c) What subjects are liked least?

Vocational

(a) Has student ever worked? Type of job(s). Tasks
(b) What was liked/disliked about work?
(c) What type of job or career is the student planning for?
(d) What are the student's plans for reaching his/her goal?

Current vocational programs, e.g., paramedical (outline specific tasks engaged in).

(6) Family:

(a) Whom is student living with?
(b) What are the occupations of family members?
(c) What are parental expectations for the student's future? (Q. What do your parents want you to do?)
(d) What are home responsiblities, e.g., cooking, errands, cleaning?

(7) Other significant information, e.g., travel training, newsletter contributions, driver education.

(8) Counseling Summary

(a) Individual Interviews:
No. of formal sessions_____Informal Interactions_____

(b) Group Sessions:
No. of formal sessions_____Informal Interactions_____

(c) Overall counseling goals: What were you and student trying to accomplish?

(d) Major activities engaged in--what types of counseling activities did you engage in most with this student. What major content themes emerged? What general observations can be made regarding the student's interaction with you, teachers, parents, peers, etc.?

Significant counselor action taken on entire case, other than exclusive contact with client, e.g., social worker contact, OVR contacts, case conference, parent contact.

(9) Outcomes--What happened, if anything, to this student as a result of interventions made by you.

(10) Recommendations

Analysis of Covariance Comparing Service School A, and Comparison Schools E and F on CMI Scale Scores

1) Comparisons for all scales were preceded by a test of homogeneity of within-class regression. No significant differences were found.

2) CMI pretest scores were used as the covariants.

3) Analysis of Covariance--Attitude Scale.

		df	M.S.	F
Tyz R	33.07	2	16.54	.67 ns
Error	1135.22	46	24.68	
Total	1168.29	48		

4) Analysis of Covariance--Self Appraisal

		df	M.S.	F
Tyz R	52.94	2	26.47	1.72 ns
Error	678.75	44	15.43	
Total	731.69	46		

5) Analysis of Covariance--Occupational Information

		df	M.S.	F
Tyz R	61.98	2	30.99	2.24 ns
Error	608.95	44	13.84	
Total	670.93	46		

6) Analysis of Covariance--Goal Setting

		df	M.S.	F
Tyz R	22.92	2	11.46	1.96 ns
Error	216.09	37	5.84	
Total	239.01	39		

7) Analysis of Covariance--Planning

		df	M.S.	F
Tyz R	118.67	2	59.34	5.51 $p<.01$
Error	387.57	36	10.77	
Total	506.24	38		

Original Posttest means		Adjusted posttest means
Service B	12.50	12.91
Comparison E	10.20	10.96
Comparison F	9.86	8.84

12.91 vs. 10.96 df 1,36 $F = 2.17$ ns
12.91 vs. 8.84 df 1,36 $F = 10.92$ $p < .005$

8) Analysis of Covariance--Problem Solving

		df	M.S.	F
Tyz R	49.20	2	24.60	2.87 $p < .10$
Error	308.53	36	8.57	
Total	357.73	38		

Original Posttest means		Adjusted posttest means
Service B	9.62	9.91
Comparison E	7.00	7.18
Comparison F	8.71	8.25

9.91 vs. 7.18 df 1,36 $F = 5.35$ $p < .05$
9.91 vs. 8.25 df 1,36 $F = 2.34$ ns